

Learning Standards for Grades PreK–6

Number Sense and Operations

- 1 Understand numbers, ways of representing numbers, relationships among numbers, and number systems
- 2 Understand meanings of operations and how they relate to one another
- 3 Compute fluently and make reasonable estimates

Grades PreK–K

Learning Standards	Selected Problems or Classroom Activities
<p><i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i></p> <p>K.N.1 Count by ones to at least 50.</p> <p>K.N.2 Match quantities up to at least 10 with numerals and words.</p> <p>K.N.3 Identify positions of objects in sequences (e.g., first, second) up to fifth.</p> <p>K.N.4 Compare sets of up to at least 10 concrete objects using appropriate language (e.g., more, more than, fewer than, same number of, one more than) and order numerals.</p> <p>K.N.5 Understand the concepts of whole and half.</p> <p>K.N.6 Identify U.S. coins by name.</p> <p>K.N.7 Use objects and drawings to model and solve related addition and subtraction problems to 20.</p> <p>K.N.8 Estimate the number of objects in a group and identify reasons.</p>	<p><i>Refers to standards K.N.1, K.N.2, and K.N.3.</i></p> <p>Listen to stories and explore books that compare number concepts.</p> <p><i>Refers to standards K.N.4, K.N.5, K.N.6, and K.N.7.</i></p> <p>Have each child estimate the number of seeds in a bag of watermelon. Inspect, remove, and count the seeds and compare the counts in the count. Children then draw and color pictures of slices of watermelon, paste the seeds on their drawings, record the number of seeds, and compare their watermelon slices (what who has more seeds).</p> <p><i>Refers to standards K.N.2 and K.N.3.</i></p> <p>Engage in games, songs, nursery rhymes, and dances that incorporate number sequences.</p>

Exploratory Concepts and Skills

- ✓ Count by ones, beginning from any number in the counting sequence.
- ✓ Represent quantities using concrete objects, and investigate the partitioning of sets. Identify equal parts of groups.
- ✓ Create problems that can be solved using addition and subtraction.

Patterns, Relations, and Algebra

- 1 Understand patterns, relations, and functions
- 2 Represent and analyze mathematical situations and structures using algebraic symbols
- 3 Use mathematical models to represent and understand quantitative relationships
- 4 Analyze change in various contexts

Grades PreK–K

Learning Standards	Selected Problems or Classroom Activities
<p><i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i></p> <p>K.P.1 Identify the attributes of objects as a foundation for sorting and classifying; e.g., a red truck, a red block, and a red ball share the attribute of being red; a square block, a square cracker, and a square book share the attribute of being square shaped.</p> <p>K.P.2 Sort and classify objects by color, shape, size, number, and other properties.</p> <p>K.P.3 Identify, reproduce, describe, extend, and create color, rhythmic, shape, number, and letter repeating patterns with simple attributes, e.g., ABA-BAB...</p> <p>K.P.4 Count by fives and tens at least up to 50.</p>	<p><i>Refers to standards K.P.1 and K.P.2.</i></p> <p>Give children groups of blocks of varying sizes, shapes, and colors. Have the children put blocks together that are the same color and ask about the shapes and sizes of those blocks. Follow the same procedure for size and shape.</p> <p><i>Play the game "Mystery Block."</i> Give clues about a mystery block and ask for a question. Example: "The mystery block is..."</p> <ul style="list-style-type: none"> • Red • Large • Square <p>What is the mystery block?</p> <p><i>Refers to standard K.P.2.</i></p> <p>Give each pair of students 25 assorted pattern blocks and have them sort the blocks. Ask students to compare the ways they sorted the blocks.</p> <p><i>Refers to standard K.P.3.</i></p> <p>Recognize and predict word patterns in familiar stories and rhymes, e.g., Bill Martin's <i>Brown Bear, Brown Bear, What Do You See?</i></p> <p><i>Refers to standard K.P.3.</i></p> <p>Use unit blocks or beads to create and identify patterns of shapes/colors. Students could identify and replicate each other's patterns.</p> <p><i>Refers to standard K.P.3.</i></p> <p>□ ♦ ▲ ○ □ ♦ ▲ ○ 1 2 3 4 5 6 7 8 9 10</p> <p>Ask the students to identify the pattern and draw shapes 8, 9, and 10.</p>

Exploratory Concepts and Skills

- ✓ Explore skip counting by twos.

Patterns, Relations, and Algebra

Geometry

- 1 Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships
- 2 Specify locations and describe spatial relationships using coordinate geometry and other representational systems
- 3 Apply transformations and use symmetry to analyze mathematical situations
- 4 Use visualization, spatial reasoning, and geometric modeling to solve problems

Grades PreK–K

Learning Standards	Selected Problems or Classroom Activities
<p><i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i></p> <p>K.G.1 Name, describe, sort, and draw simple two-dimensional shapes.</p> <p>K.G.2 Describe attributes of two-dimensional shapes, e.g., number of sides, number of corners.</p> <p>K.G.3 Name and compare three-dimensional shapes.</p> <p>K.G.4 Identify positions of objects in space, and use appropriate language (e.g., beside, inside, next to, close to, above, below, apart) to describe and compare their relative positions.</p>	<p><i>Refers to standards K.G.1 and K.G.2.</i></p> <p>Collate the edges of each shape.</p> <p>2. Count the corners of each shape and find the ones that are the same.</p> <p><i>Refers to standards K.G.1 and K.G.2.</i></p> <p>Working with shapes: feel and identify shapes without looking. Trace around templates of various shapes, cut snacks cut into various shapes, cut cookie dough into basic shapes.</p> <p><i>Refers to standards K.G.1 and K.G.2.</i></p> <p>Ask students to find basic shapes in their environment, e.g., go on a "shape walk" indoors or out to find examples of circles, triangles, squares; have students bring in examples from home.</p> <p><i>Refers to standard K.G.4.</i></p> <p>Have students explore positions in space (up, down, over, under, high, low, behind, inside, outside, on top) and relative distance between objects or locations (near, far, next to, apart, together).</p>

Exploratory Concepts and Skills

- ✓ Investigate symmetry of two- and three-dimensional shapes and constructions.

Measurement

- 1 Understand measurable attributes of objects and the units, systems, and processes of measurement
- 2 Apply appropriate techniques, tools, and formulas to determine measurements

Grades PreK–K

Learning Standards	Selected Problems or Classroom Activities
<p><i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i></p> <p>K.M.1 Recognize and compare the attributes of length, volume/capacity, weight, area, and time using appropriate language, e.g., longer, taller, shorter, same length, heavier, lighter, same weight, holds more, holds less, holds the same amount.</p> <p>K.M.2 Make and use estimates of measurements from everyday experiences.</p> <p>K.M.3 Use nonstandard units to measure length, area, weight, and capacity.</p>	<p><i>Refers to standards K.M.1 and K.M.2.</i></p> <p>Students can get concrete experiences such as pouring (rubber or filling, popicle sticks, teddy bears to represent the object of the block construction, the length or width of classroom materials, or the distance between objects).</p> <p><i>Refers to standards K.M.2 and K.M.3.</i></p> <p>Estimate if how many cups of water are needed to fill a large container, if which container will hold the most jelly beans, or if the number of beads needed to make a necklace or bracelet. Count or measure to verify the actual results of the students' estimates.</p> <p><i>Refers to standard K.M.3.</i></p> <p>Have students use paper clips to measure crayons, pencils, and rulers. Compare the lengths of these objects to each other and use appropriate vocabulary to describe them.</p>

Exploratory Concepts and Skills

- ✓ Explore and use standard units to measure and compare temperature, length, and time.
- ✓ Identify positions of events over time, e.g., earlier, later.

Data Analysis, Statistics, and Probability

- 1 Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them
- 2 Select and use appropriate statistical methods to analyze data
- 3 Develop and evaluate inferences and predictions that are based on data
- 4 Understand and apply basic concepts of probability

Grades PreK–K

Learning Standards	Selected Problems or Classroom Activities
<p><i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i></p> <p>K.D.1 Collect, sort, organize, and draw conclusions about data using concrete objects, pictures, numbers, and graphs.</p>	See below for sample problems.

Exploratory Concepts and Skills

- ✓ Collect and organize data in lists, tables, and simple graphs.

Refers to standard K.D.1

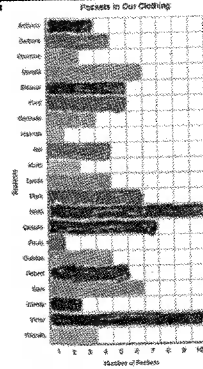
Children use chips to represent objects in the stories below in order to be able easily.

Story 1
Ms. Chapman has large floppy hats. Put down one chip for each hat.
Ms. Chapman has a red hat with white stripes.
She has a pink butterfly flower.
She has a green hat with white stripes.
She has a blue hat with white stripes.
How many large floppy hats does she have?

Story 2
Mr. Miller has animal hats. Put down one chip for each hat.
Mr. Miller has a snake hat with white stripes.
He has a snake hat with white stripes.
He has a dog hat that barks.
How many animal hats does he have?

Who has more hats?

Refers to standard K.D.1f
Create a bar graph that illustrates the number of pockets in classmates' clothes.



Mathematics | Kindergarten

In kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers; initially with sets of objects; (2) describing shapes and space. More learning time in kindergarten should be devoted to number than to other topics.

- (1) Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set, counting out a given number of objects, comparing sets or numerals, and modeling simple joining and separating situations with sets of objects, or eventually with equations such as $5 + 2 = 7$ and $7 - 2 = 5$. (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.

- (2) Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

Grade K Overview

Counting and Cardinality

- Know number names and the count sequence.
- Count to tell the number of objects.
- Compare numbers.

Operations and Algebraic Thinking

- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Number and Operations in Base Ten

- Work with numbers 11–19 to gain foundations for place value.

Measurement and Data

- Describe and compare measurable attributes.
- Classify objects and count the number of objects in categories.

Geometry

- Identify and describe shapes.
- Analyze, compare, create, and compose shapes.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Counting and Cardinality

K.CC

Know number names and the count sequence.

1. Count to 100 by ones and by tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).

Count to tell the number of objects.

4. Understand the relationship between numbers and quantities; connect counting to cardinality.
 - a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
 - b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
 - c. Understand that each successive number name refers to a quantity that is one larger.
5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

Compare numbers.

6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
7. Compare two numbers between 1 and 10 presented as written numerals.

Operations and Algebraic Thinking

K.OA

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
5. Fluently add and subtract within 5.

Include groups with up to ten objects. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)

Number and Operations in Base Ten

K.NBT

Work with numbers 11–19 to gain foundations for place value.

1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Measurement and Data

K.MD

Describe and compare measurable attributes.

1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
2. Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

Classify objects and count the number of objects in each category.

3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Geometry

K.G

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Analyze, compare, create, and compose shapes.

4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

Limit category counts to be less than or equal to 10.

Kindergarten

Introduction

In kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers; initially with sets of objects; and (2) describing shapes and space. More learning time in kindergarten should be devoted to number than to other topics.

1. Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set, counting out a given number of objects, comparing sets or numerals, and modeling simple joining and separating situations with sets of objects, or eventually with equations such as $5 + 2 = 7$ and $7 - 2 = 5$. (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.
2. Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

The Standards for Mathematical Practice complement the content standards so that students increasingly engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle, and high school years.

Kindergarten Overview

Counting and Cardinality

- A. Know number names and the counting sequence.
- B. Count to tell the number of objects.
- C. Compare numbers.

Operations and Algebraic Thinking

- A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Number and Operations in Base Ten

- A. Work with numbers 11–19 to gain foundations for place value.

Measurement and Data

- A. Describe and compare measurable attributes.
- B. Classify objects and count the number of objects in each category.

Geometry

- A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
- B. Analyze, compare, create, and compose shapes.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Kindergarten Content Standards

Counting and Cardinality

K.CC

A. Know number names and the count sequence.

1. Count to 100 by ones and by tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at one).
3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).
4. Understand the relationship between numbers and quantities; connect counting to cardinality.
 - a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
 - b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
 - c. Understand that each successive number name refers to a quantity that is one larger. Recognize the one more pattern of counting using objects.
5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group for groups with up to 10 objects, e.g., by using matching and counting strategies.
7. Compare two numbers between 1 and 10 presented as written numerals.

Operations and Algebraic Thinking

K.OA

A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
5. Fluently add and subtract within 5, including zero.

Number and Operations in Base Ten

K.NBT

A. Work with numbers 11–19 to gain foundations for place value.

1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Measurement and Data

K.MD

A. Describe and compare measurable attributes.

1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
2. Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
3. Classify objects into given categories; count the numbers of objects in each category (up to and including 10) and sort the categories by count.

Geometry

K.G

A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

3. Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

Measurement

Grades 1–2

Learning Standards	Selected Problems or Classroom Activities
<p><i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i></p> <p>2.M.1 Identify parts of the day (e.g., morning, afternoon, evening), days of the week, and months of the year. Identify dates using a calendar.</p> <p>2.M.2 Tell time at quarter-hour intervals on analog and digital clocks using a.m. and p.m.</p> <p>2.M.3 Compare the length, weight, area, and volume of two or more objects by using direct comparison.</p> <p>2.M.4 Measure and compare common objects using metric and English units of length measurement, e.g., centimeter, inch.</p> <p>2.M.5 Select and correctly use the appropriate measurement tools, e.g., ruler, balance scale, thermometer.</p> <p>2.M.6 Make and use estimates of measurement, including time, volume, weight, and area.</p>	<p><i>Refers to standards 2.M.1 and 2.M.2</i></p> <p>With the children's help, make a schedule of activities for the morning, recording times to the hour and half-hour. Set the alarm of both a digital clock and an analog clock to ring at the start of each new activity. Call on children to read the clock to verify that they match the times in the schedule.</p> <p><i>Refers to standards 2.M.3, 2.M.4, and 2.M.5</i></p> <p>A teacher has given her class a list of things to measure, including the width of a doorway. In finding out how the students would approach the task, she had little choice of measuring tools up to them. Aliza was using a ruler when the teacher stopped by the desk to observe her measuring her table. "It's twelve inches," Aliza said as she wrote the measurement on the recording sheet. Right as she measured her pencil, which was noticeably shorter than the book. The teacher observed that Aliza's hand slipped as she was signing her ruler with the pencil. Aliza made no comment but recorded this measurement as twelve inches also.</p> <p>"I notice that you wrote that each of these is twelve inches," said the teacher. "I'm confused. The book looks much longer than the pencil to me. What do you think?"</p> <p>Aliza pushed both items close together and studied them. "You're right," she said. "The book is longer, but they are both twelve inches."</p> <p>In her anecdotal records, the teacher noted what happened in order to address the issue in future lessons and conversations with Aliza and the class.</p>

Exploratory Concepts and Skills

- Explore measurable attributes of objects, including length, perimeter, weight, area, volume, and temperature. Compare concrete objects using these measures.

Refers to standards 2.D.2 and 2.D.3

Place one green apple and one red apple into a bag. Have the students predict which color apple will come out most often. Next, have each student in turn pick one apple from the bag without looking. Make a tally of red vs. green apples for the entire class's picks. Have the class compare their predictions with the outcome of the experiment.

Data Analysis, Statistics, and Probability

Grades 1–2

Learning Standards	Selected Problems or Classroom Activities
<p><i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i></p> <p>2.D.1 Use interviews, surveys, and observations to gather data about themselves and their surroundings.</p> <p>2.D.2 Organize, classify, represent, and interpret data using tallies, charts, tables, bar graphs, pictographs, and Venn diagrams; interpret the representations.</p> <p>2.D.3 Formulate inferences (draw conclusions) and make educated guesses (conjectures) about a situation based on information gained from data.</p> <p>2.D.4 Decide which outcomes of experiments are most likely.</p>	<p>See below for sample problems.</p>

Exploratory Concepts and Skills

- Investigate more likely, likely, and impossible outcomes by conducting experiments using spinners, counters, and other concrete objects.
- List and count the number of possible pairings of objects from two sets.

Refers to standards 2.D.1 and 2.D.2

Mr. Greenleaf's class collected data on the number of children in each student's family. The first graders found the numbers of children to be:

2 2 1 1 1 2 2 1 3 4 1 1 2 3 5 2 4

- Make a tally sheet and then a bar graph to show the number of children in the students' families.
- Describe the results, i.e., what is the most common or frequent number of people in a family? How many more students have families with 2 or fewer children compared with families with 3 or more children?

Refers to standards 2.D.2 and 2.D.3

Students each trace one of their own shoes on paper and cut it out. Next, they place their cutouts on a floor graph (pictograph) that identifies the kind of footwear each is wearing, e.g., sneakers, boots, sandals. Discuss what the graph shows. Extend the activity by using tally marks and making a bar graph on inch-square graph paper.

Refers to standards 2.D.2 and 2.D.3

Caleb has lots of pennies, nickels, and dimes in his pocket. He takes out three coins and puts them on the table. How much money could he have on the table? Make a list.

Mathematics | Grade 2

In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

(1) Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).

(2) Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.

(3) Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.

(4) Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

Mathematical Practices

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Grade 2 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

Number and Operations in Base Ten

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.
- Work with time and money.
- Represent and interpret data.

Geometry

- Reason with shapes and their attributes.

Operations and Algebraic Thinking

2.OA

Represent and solve problems involving addition and subtraction.

- Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹

Add and subtract within 20.

- Fluently add and subtract within 20 using mental strategies.² By end of Grade 2, know from memory all sums of two one-digit numbers.

Work with equal groups of objects to gain foundations for multiplication.

- Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
- Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Number and Operations in Base Ten

2.NBT

Understand place value.

- Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
 - 100 can be thought of as a bundle of ten tens—called a "hundred."
 - The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
- Count within 1000; skip-count by 5s, 10s, and 100s.
- Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
- Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Use place value understanding and properties of operations to add and subtract.

- Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- Add up to four two-digit numbers using strategies based on place value and properties of operations.
- Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
- Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
- Explain why addition and subtraction strategies work, using place value and the properties of operations.³

¹See Glossary, Table 1.

²See standard 1.OA.6 for a list of mental strategies.

³Explanations may be supported by drawings or objects.

Measurement and Data

2.MD

Measure and estimate lengths in standard units.

- Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- Estimate lengths using units of inches, feet, centimeters, and meters.
- Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Relate addition and subtraction to length.

- Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
- Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

Work with time and money.

- Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
- Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*

Represent and interpret data.

- Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
- Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems¹ using information presented in a bar graph.

Geometry

2.G

Reason with shapes and their attributes.

- Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
- Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
- Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves*, *thirds*, *half of*, a *third of*, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

¹See Glossary, Table 1.

²Sizes are compared directly or visually, not compared by measuring.

Grade 2

Introduction

In grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

- Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1,000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).
- Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1,000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.
- Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.
- Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

The Standards for Mathematical Practice complement the content standards so that students increasingly engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle, and high school years.

Grade 2 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

Number and Operations in Base Ten

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

- Measure lengths indirectly and by iterating length units.
- Relate addition and subtraction to length.
- Work with time and money.
- Represent and interpret data.

Geometry

- Reason with shapes and their attributes.

Standards for Mathematical Practice

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Grade 2 Content Standards

Operations and Algebraic Thinking

2.OA

A. Represent and solve problems involving addition and subtraction.

- Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹
- Fluently add and subtract within 20 using mental strategies.² By end of grade 2, know from memory all sums of two single-digit numbers and related differences.

For example, the sum $6 + 5 = 11$ has related differences of $11 - 5 = 6$ and $11 - 6 = 5$.
- Work with equal groups of objects to gain foundations for multiplication.
- Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
- Use addition to find the total number of objects arranged in rectangular arrays with up to five rows and up to five columns; write an equation to express the total as a sum of equal addends.

Number and Operations in Base Ten

2.NBT

A. Understand place value.

- Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
 - 100 can be thought of as a bundle of ten tens—called a "hundred."
 - The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
- Count within 1,000; skip-count by 5s, 10s, and 100s. Identify patterns in skip counting starting at any number.
- Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.
- Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- Use place value understanding and properties of operations to add and subtract.
- Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- Add up to four two-digit numbers using strategies based on place value and properties of operations.
- Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
- Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
- Explain why addition and subtraction strategies work, using place value and the properties of operations.³

¹See Glossary, Table 1.

²Strategies such as counting on; making tens; decomposing a number; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.

³Explanations may be supported by drawings or objects.

Measurement and Data

2.MD

A. Measure and estimate lengths in standard units.

- Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- Estimate lengths using units of inches, feet, centimeters, and meters.
- Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
- Relate addition and subtraction to length.
- Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
- Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

C. Work with time and money.

- Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
 - Know the relationships of time, including seconds in a minute, minutes in an hour, hours in a day, days in a week; days in a month and a year and approximate number of weeks in a month and weeks in a year.
- Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies (up to \$10), using \$ and ¢ symbols appropriately and whole dollar amounts.

For example, if you have 2 dimes and 3 pennies, how many cents do you have? If you have 53¢ and 4 quarters, how many dollars or cents do you have? (Students are not expected to use decimal notation.)

D. Represent and interpret data.

- Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Organize and record the data on a line plot (dot plot), where the horizontal scale is marked off in whole-number units.
- Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems,¹ using information presented in a bar graph.

Geometry

2.G

A. Reason with shapes and their attributes.

- Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, squares, rectangles, rhombuses, trapezoids, pentagons, hexagons, and cubes.
- Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
- Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves*, *thirds*, *half of*, a *third of*, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

Grade 3 Standards

Continued to the grade 3 standards page.

Number Sense and Operations

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 3.N.1 Exhibit an understanding of the value of the digits right base ten numerals by reading, modeling, writing, comparing, and relating whole numbers through 1,000.
- 3.N.2 Represent, order, and compare numbers through 1,000. Represent measurement equivalent units (e.g., $453 \text{ g} = 100 \text{ g} + 5 \text{ g} + 10 \text{ g} + 10 \text{ g}$ and $100 \text{ g} = 10 \text{ g} + 10 \text{ g} + 10 \text{ g} + 10 \text{ g} + 10 \text{ g}$).
- 3.N.3 Identify and represent fractions (fractions with denominators through 10) in part-whole and pairs of groups. Model and represent a third number (e.g., $1/3$ of 30 is 10) and a whole number as a fraction (e.g., $1/3$ of 30 is 10).
- 3.N.4 Locate and order whole numbers on a number line. Locate and order whole numbers, and multiples of whole numbers through 10. Identify the number in those classes (e.g., 10 is a multiple of 2, 5, and 10).
- 3.N.5 Recognize classes of whole numbers, and multiples of whole numbers through 10. Identify the number in those classes (e.g., 10 is a multiple of 2, 5, and 10).
- 3.N.6 Select, use, and explain models to solve problems involving multiplication through 10. Relate multiplication problems to corresponding division problems. Solve a word problem to represent 5×3 and $15 \div 3$.

Patterns, Relations, and Algebra

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 3.P.1 Create, describe, extend, and explain simple geometric patterns and addition and subtraction patterns (e.g., 2, 4, 10, ..., and 10, 40, 100, ...).
- 3.P.2 Determine which symbol ($<$, $=$, $>$) is appropriate for a given number sentence (e.g., $7 \times 8 > 7 \times 9$).
- 3.P.3 Determine the value of a variable through 10 in simple equations involving addition, subtraction, or multiplication (e.g., $2 + \square = 5$, $5 \times \square = 15$, $10 \div \square = 2$).
- 3.P.4 Write number sentences using $<$, $=$, $>$, $+$, $-$, \times , \div , and $=$ to represent mathematical relationships in everyday situations.

Geometry

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 3.G.1 Compare and classify attributes and other features (e.g., number of sides, corners, vertices, and angles) of two-dimensional shapes in the plane.
- 3.G.2 Describe, model, draw, compare, and classify two-dimensional shapes, including rectangles, squares, and quadrilaterals. Identify and describe simple three-dimensional shapes (e.g., cones, spheres, and pyramids).
- 3.G.3 Identify angles as right angles, less than a right angle, or greater than a right angle.
- 3.G.4 Identify and draw parallel lines, perpendicular lines, and other geometric lines.
- 3.G.5 Using ordered pairs of whole numbers to locate points on a grid.
- 3.G.6 Identify and draw lines of symmetry in two-dimensional shapes.
- 3.G.7 Predict and explain the results of transformations of two-dimensional shapes.

Measurement

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 3.M.1 Demonstrate an understanding of the attributes length, area, weight, and select the appropriate unit of unit for measuring each attribute using both the U.S. customary (inches) and metric systems.
- 3.M.2 Carry out simple area calculations using a system of measurement (e.g., boxes to measure area, or a grid to measure area). The number of units is measured by the area of the unit.
- 3.M.3 Identify and use appropriate units and systems of measurement (e.g., inches, feet, yards, miles, pounds, ounces, grams, kilograms, liters, and gallons) to measure length, area, weight, and volume.
- 3.M.4 Identify and use appropriate units and systems of measurement (e.g., inches, feet, yards, miles, pounds, ounces, grams, kilograms, liters, and gallons) to measure length, area, weight, and volume.
- 3.M.5 Identify and use appropriate units and systems of measurement (e.g., inches, feet, yards, miles, pounds, ounces, grams, kilograms, liters, and gallons) to measure length, area, weight, and volume.

Data Analysis/Statistics and Probability

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 3.D.1 Collect and organize data using observation, survey, or experiment, and identify appropriate ways to display the data. The number of units is measured by the area of the unit.
- 3.D.2 Make representations of a data set in the form of tables, bar graphs, pictographs, or line graphs with the area of the unit.
- 3.D.3 Construct and draw conclusions from data sets in the form of tables, bar graphs, pictographs, or line graphs.
- 3.D.4 List and count the results of possible outcomes of objects from two sets, e.g., how many different outfits can be made from a set of two shirts and a set of two pants.

Number Sense and Operations

Learning Standards	Selected Problems or Classroom Activities
3.N.1 Exhibit an understanding of the value of the digits right base ten numerals by reading, modeling, writing, comparing, and relating whole numbers through 1,000.	See page 18 for sample problems.
3.N.2 Represent, order, and compare numbers through 1,000. Represent measurement equivalent units (e.g., $453 \text{ g} = 100 \text{ g} + 5 \text{ g} + 10 \text{ g} + 10 \text{ g}$ and $100 \text{ g} = 10 \text{ g} + 10 \text{ g} + 10 \text{ g} + 10 \text{ g} + 10 \text{ g}$).	
3.N.3 Identify and represent fractions (fractions with denominators through 10) in part-whole and pairs of groups. Model and represent a third number (e.g., $1/3$ of 30 is 10) and a whole number as a fraction (e.g., $1/3$ of 30 is 10).	
3.N.4 Locate and order whole numbers on a number line. Locate and order whole numbers, and multiples of whole numbers through 10. Identify the number in those classes (e.g., 10 is a multiple of 2, 5, and 10).	
3.N.5 Recognize classes of whole numbers, and multiples of whole numbers through 10. Identify the number in those classes (e.g., 10 is a multiple of 2, 5, and 10).	
3.N.6 Select, use, and explain models to solve problems involving multiplication through 10. Relate multiplication problems to corresponding division problems. Solve a word problem to represent 5×3 and $15 \div 3$.	

Although this standard is appropriate as stated for this grade span, the state assessment program at the 3-4 grade span will use multiplication of only up to two digits by two digits in the present year.

Number Sense and Operations

Learning Standards	Selected Problems or Classroom Activities
3.N.1 Exhibit an understanding of the value of the digits right base ten numerals by reading, modeling, writing, comparing, and relating whole numbers through 1,000.	
3.N.2 Represent, order, and compare numbers through 1,000. Represent measurement equivalent units (e.g., $453 \text{ g} = 100 \text{ g} + 5 \text{ g} + 10 \text{ g} + 10 \text{ g}$ and $100 \text{ g} = 10 \text{ g} + 10 \text{ g} + 10 \text{ g} + 10 \text{ g} + 10 \text{ g}$).	
3.N.3 Identify and represent fractions (fractions with denominators through 10) in part-whole and pairs of groups. Model and represent a third number (e.g., $1/3$ of 30 is 10) and a whole number as a fraction (e.g., $1/3$ of 30 is 10).	
3.N.4 Locate and order whole numbers on a number line. Locate and order whole numbers, and multiples of whole numbers through 10. Identify the number in those classes (e.g., 10 is a multiple of 2, 5, and 10).	
3.N.5 Recognize classes of whole numbers, and multiples of whole numbers through 10. Identify the number in those classes (e.g., 10 is a multiple of 2, 5, and 10).	
3.N.6 Select, use, and explain models to solve problems involving multiplication through 10. Relate multiplication problems to corresponding division problems. Solve a word problem to represent 5×3 and $15 \div 3$.	

Exploratory Concepts and Skills

Learning Standards	Selected Problems or Classroom Activities
3.N.1 Exhibit an understanding of the value of the digits right base ten numerals by reading, modeling, writing, comparing, and relating whole numbers through 1,000.	
3.N.2 Represent, order, and compare numbers through 1,000. Represent measurement equivalent units (e.g., $453 \text{ g} = 100 \text{ g} + 5 \text{ g} + 10 \text{ g} + 10 \text{ g}$ and $100 \text{ g} = 10 \text{ g} + 10 \text{ g} + 10 \text{ g} + 10 \text{ g} + 10 \text{ g}$).	
3.N.3 Identify and represent fractions (fractions with denominators through 10) in part-whole and pairs of groups. Model and represent a third number (e.g., $1/3$ of 30 is 10) and a whole number as a fraction (e.g., $1/3$ of 30 is 10).	
3.N.4 Locate and order whole numbers on a number line. Locate and order whole numbers, and multiples of whole numbers through 10. Identify the number in those classes (e.g., 10 is a multiple of 2, 5, and 10).	
3.N.5 Recognize classes of whole numbers, and multiples of whole numbers through 10. Identify the number in those classes (e.g., 10 is a multiple of 2, 5, and 10).	
3.N.6 Select, use, and explain models to solve problems involving multiplication through 10. Relate multiplication problems to corresponding division problems. Solve a word problem to represent 5×3 and $15 \div 3$.	

Patterns, Relations, and Algebra

Learning Standards	Selected Problems or Classroom Activities
3.P.1 Create, describe, extend, and explain simple geometric patterns and addition and subtraction patterns (e.g., 2, 4, 10, ..., and 10, 40, 100, ...).	
3.P.2 Determine which symbol ($<$, $=$, $>$) is appropriate for a given number sentence (e.g., $7 \times 8 > 7 \times 9$).	
3.P.3 Determine the value of a variable through 10 in simple equations involving addition, subtraction, or multiplication (e.g., $2 + \square = 5$, $5 \times \square = 15$, $10 \div \square = 2$).	
3.P.4 Write number sentences using $<$, $=$, $>$, $+$, $-$, \times , \div , and $=$ to represent mathematical relationships in everyday situations.	

Exploratory Concepts and Skills

Learning Standards	Selected Problems or Classroom Activities
3.P.1 Create, describe, extend, and explain simple geometric patterns and addition and subtraction patterns (e.g., 2, 4, 10, ..., and 10, 40, 100, ...).	
3.P.2 Determine which symbol ($<$, $=$, $>$) is appropriate for a given number sentence (e.g., $7 \times 8 > 7 \times 9$).	
3.P.3 Determine the value of a variable through 10 in simple equations involving addition, subtraction, or multiplication (e.g., $2 + \square = 5$, $5 \times \square = 15$, $10 \div \square = 2$).	
3.P.4 Write number sentences using $<$, $=$, $>$, $+$, $-$, \times , \div , and $=$ to represent mathematical relationships in everyday situations.	

Mathematics | Grade 3

In Grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

- (1) Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.
- (2) Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole. For example, $1/2$ of the point in a small bucket could be less than $1/3$ of the point in a larger bucket, but $1/3$ of a ribbon is longer than $1/5$ of the same ribbon because when the ribbon is divided into 5 equal parts, the parts are longer than when the ribbon is divided into 3 equal parts. Students are able to use fractions to represent numbers equal to less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.
- (3) Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same-size units of area required to cover the shape without gaps or overlaps; a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.
- (4) Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.

Grade 3 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Number and Operations—Fractions

- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Measurement and Data

- Develop understanding of fractions as numbers.

Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Represent and Interpret Data

- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

Geometry

- Reason with shapes and their attributes.

Mathematical Practices

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Grade 3

Introduction

In grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

1. Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.
2. Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole. For example, $1/2$ of the point in a small bucket could be less than $1/3$ of the point in a larger bucket, but $1/3$ of a ribbon is longer than $1/5$ of the same ribbon because when the ribbon is divided into 3 equal parts, the parts are longer than when the ribbon is divided into 5 equal parts. Students are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.
3. Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same-size units of area required to cover the shape without gaps or overlaps; a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.
4. Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.

The Standards for Mathematical Practice complement the content standards so that students increasingly engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle, and high school years.

Grade 3 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Number and Operations—Fractions

- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Represent and Interpret Data

- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

Geometry

- Reason with shapes and their attributes.

Standards for Mathematical Practice

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Grade 3 Content Standards

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division.

- Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in five groups of seven objects each.

For example, describe a context in which a total number of objects can be expressed as 5×7 .

- Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.

For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.

- Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹

Determine the unknown whole number in a multiplication or division equation relating three whole numbers.

For example, determine the unknown number that makes the equation true in each of the equations $8 \times \square = 48$, $5 \times \square = 35$, $48 \div \square = 6$.

- Understand properties of multiplication and the relationship between multiplication and division.

Apply properties of operations to multiply.

For example, know that $8 \times 5 = 40$, one knows $8 \times 6 = 48$, one knows $8 \times 7 = 56$, one knows $8 \times 8 = 64$, one knows $8 \times 9 = 72$, one knows $8 \times 10 = 80$, one knows $8 \times 11 = 88$, one knows $8 \times 12 = 96$.

For example, know that $7 \times 3 = 21$ and that $3 \times 9 = 27$, one knows $3 \times 4 = 12$, one knows $3 \times 5 = 15$, one knows $3 \times 6 = 18$, one knows $3 \times 7 = 21$, one knows $3 \times 8 = 24$, one knows $3 \times 9 = 27$, one knows $3 \times 10 = 30$, one knows $3 \times 11 = 33$, one knows $3 \times 12 = 36$.

For example, know that $4 \times 4 = 16$ and that $3 \times 5 = 15$, one knows $4 \times 3 = 12$, one knows $4 \times 2 = 8$, one knows $4 \times 1 = 4$, one knows $2 \times 4 = 8$, one knows $2 \times 3 = 6$, one knows $2 \times 2 = 4$, one knows $2 \times 1 = 2$, one knows $1 \times 4 = 4$, one knows $1 \times 3 = 3$, one knows $1 \times 2 = 2$, one knows $1 \times 1 = 1$.

For example, know that $6 \times 2 = 12$ and that $3 \times 4 = 12$, one knows $6 \times 1 = 6$, one knows $3 \times 2 = 6$, one knows $3 \times 1 = 3$, one knows $2 \times 3 = 6$, one knows $2 \times 2 = 4$, one knows $2 \times 1 = 2$, one knows $1 \times 3 = 3$, one knows $1 \times 2 = 2$, one knows $1 \times 1 = 1$.

For example, know that $8 \times 5 = 40$ and that $5 \times 8 = 40$, one knows $8 \times 4 = 32$, one knows $5 \times 7 = 35$, one knows $8 \times 3 = 24$, one knows $5 \times 6 = 30$, one knows $8 \times 2 = 16$, one knows $5 \times 4 = 20$, one knows $8 \times 1 = 8$, one knows $5 \times 3 = 15$, one knows $8 \times 0 = 0$, one knows $5 \times 2 = 10$, one knows $8 \times 6 = 48$, one knows $5 \times 8 = 40$, one knows $8 \times 7 = 56$, one knows $5 \times 9 = 45$, one knows $8 \times 9 = 72$, one knows $5 \times 10 = 50$, one knows $8 \times 10 = 80$, one knows $5 \times 11 = 55$, one knows $8 \times 11 = 88$, one knows $5 \times 12 = 60$, one knows $8 \times 12 = 96$.

For example, know that $7 \times 2 = 14$ and that $2 \times 7 = 14$, one knows $7 \times 1 = 7$, one knows $2 \times 3 = 6$, one knows $7 \times 0 = 0$, one knows $2 \times 2 = 4$, one knows $7 \times 3 = 21$, one knows $2 \times 4 = 8$, one knows $7 \times 4 = 28$, one knows $2 \times 5 = 10$, one knows $7 \times 5 = 35$, one knows $2 \times 6 = 12$, one knows $7 \times 6 = 42$, one knows $2 \times 7 = 14$, one knows $7 \times 7 = 49$, one knows $2 \times 8 = 16$, one knows $7 \times 8 = 56$, one knows $2 \times 9 = 18$, one knows $7 \times 9 = 63$, one knows $2 \times 10 = 20$, one knows $7 \times 10 = 70$, one knows $2 \times 11 = 22$, one knows $7 \times 11 = 77$, one knows $2 \times 12 = 24$, one knows $7 \times 12 = 84$.

For example, know that $6 \times 2 = 12$ and that $3 \times 4 = 12$, one knows $6 \times 1 = 6$, one knows $3 \times 2 = 6$, one knows $3 \times 1 = 3$, one knows $2 \times 3 = 6$, one knows $2 \times 2 = 4$, one knows $2 \times 1 = 2$, one knows $1 \times 3 = 3$, one knows $1 \times 2 = 2$, one knows $1 \times 1 = 1$.

For example, know that $8 \times 5 = 40$ and that $5 \times 8 = 40$, one knows $8 \times 4 = 32$, one knows $5 \times 7 = 35$, one knows $8 \times 3 = 24$, one knows $5 \times 6 = 30$, one knows $8 \times 2 = 16$, one knows $5 \times 4 = 20$, one knows $8 \times 1 = 8$, one knows $5 \times 3 = 15$, one knows $8 \times 0 = 0$, one knows $5 \times 2 = 10$, one knows $8 \times 6 = 48$, one knows $5 \times 8 = 40$, one knows $8 \times 7 = 56$, one knows $5 \times 9 = 45$, one knows $8 \times 9 = 72$, one knows $5 \times 10 = 50$, one knows $8 \times 10 = 80$, one knows $5 \times 11 = 55$, one knows $8 \times 11 = 88$, one knows $5 \times 12 = 60$, one knows $8 \times 12 = 96$.

For example, know that $7 \times 2 = 14$ and that $2 \times 7 = 14$, one knows $7 \times 1 = 7$, one knows $2 \times 3 = 6$, one knows $7 \times 0 = 0$, one knows $2 \times 2 = 4$, one knows $7 \times 3 = 21$, one knows $2 \times 4 = 8$, one knows $7 \times 4 = 28$, one knows $2 \times 5 = 10$, one knows $7 \times 5 = 35$, one knows $2 \times 6 = 12$, one knows $7 \times 6 = 42$, one knows $2 \times 7 = 14$, one knows $7 \times 7 = 49$, one knows $2 \times 8 = 16$, one knows $7 \times 8 = 56$, one knows $2 \times 9 = 18$, one knows $7 \times 9 = 63$, one knows $2 \times 10 = 20$, one knows $7 \times 10 = 70$, one knows $2 \times 11 = 22$, one knows $7 \times 11 = 77$, one knows $2 \times 12 = 24$, one knows $7 \times 12 = 84$.

For example, know that $6 \times 2 = 12$ and that $3 \times 4 = 12$, one knows $6 \times 1 = 6$, one knows $3 \times 2 = 6$, one knows $3 \times 1 = 3$, one knows $2 \times 3 = 6$, one knows $2 \times 2 = 4$, one knows $2 \times 1 = 2$, one knows $1 \times 3 = 3$, one knows $1 \times 2 = 2$, one knows $1 \times 1 = 1$.

For example, know that $8 \times 5 = 40$ and that $5 \times 8 = 40$, one knows $8 \times 4 = 32$, one knows $5 \times 7 = 35$, one knows $8 \times 3 = 24$, one knows $5 \times 6 = 30$, one knows $8 \times 2 = 16$, one knows $5 \times 4 = 20$, one knows $8 \times 1 = 8$, one knows $5 \times 3 = 15$, one knows $8 \times 0 = 0$, one knows $5 \times 2 = 10$, one knows $8 \times 6 = 48$, one knows $5 \times 8 = 40$, one knows $8 \times 7 = 56$, one knows $5 \times 9 = 45$, one knows $8 \times 9 = 72$, one knows $5 \times 10 = 50$, one knows $8 \times 10 = 80$, one knows $5 \times 11 = 55$, one knows $8 \times 11 = 88$, one knows $5 \times 12 = 60$, one knows $8 \times 12 = 96$.

For example, know that $7 \times 2 = 14$ and that $2 \times 7 = 14$, one knows $7 \times 1 = 7$, one knows $2 \times 3 = 6$, one knows $7 \times 0 = 0$, one knows $2 \times 2 = 4$, one knows $7 \times 3 = 2$

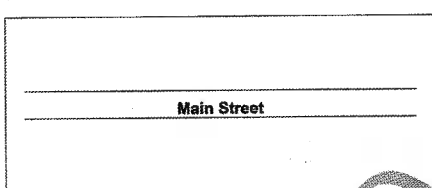
Geometry

Grades 3–4	Learning Standards	Selected Problems or Classroom Activities
	<i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i>	See next page for sample problems.
4.0.1	Compare and analyze attributes and other features (e.g., number of sides, faces, corners, right angles, diagonals, and symmetry) of two- and three-dimensional geometric shapes.	
4.0.2	Describe, model, compare, and classify two- and three-dimensional shapes, e.g., circles, polygons—especially triangles and quadrilaterals—cubes, spheres, and pyramids.	
4.0.3	Recognize similar figures.	
4.0.4	Identify angles as acute, right, or obtuse.	
4.0.5	Describe and draw intersecting, parallel, and perpendicular lines.	
4.0.6	Using ordered pairs of numbers and/or letters, graph, locate, identify points, and describe paths (first quadrant).	
4.0.7	Describe and apply concepts such as reflection (flips), rotation (turns), and translation (slides) to two-dimensional shapes.	
4.0.8	Identify and describe line symmetry in two-dimensional shapes.	
4.0.9	Predict and calculate the results of combining, cutting, and combining two- and three-dimensional figures.	

Exploratory Concepts and Skills

- Predict and describe results of transformations (e.g., translations, rotations, and reflections) on two-dimensional shapes.
- Investigate two-dimensional representations of three-dimensional objects.

Refers to standards 4.G.4 and 4.G.5

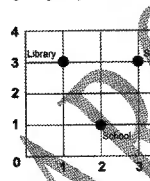


Definitions: Obtuse angle—an angle greater than a right angle; acute angle—an angle less than a right angle.

- Draw Broadway Street parallel to Main Street. Write the name Broadway on the right street.
- Draw Birch Street perpendicular to Main Street. Write the name Birch on this street.
- Draw Walnut Street so that it intersects Main Street but is not perpendicular to Main Street. Write the name Walnut on this street.
- Determine what types of angles are present.

Refers to standard 4.G.6

- Use the map below to answer the following questions.
- What are the coordinates of the school?
 - Which building is at 3, 37 S.2?
 - Moving along the grid lines, how many blocks is it from the library to the park?



Measurement

Grades 3–4	Learning Standards	Selected Problems or Classroom Activities
	<i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i>	See next page for sample problems.
4.M.1	Demonstrate an understanding of such attributes as length, area, weight, and volume, and select the appropriate type of unit for measuring each attribute.	
4.M.2	Carry out unit conversions within a system of measurement, e.g., hours to minutes, cents to dollars, yards to feet or inches, etc.	
4.M.3	Identify time to the minute on analog and digital clocks using a.m. and p.m. Compare elapsed time using a clock (e.g., hours and minutes since...) and using a calendar (e.g., days since...).	
4.M.4	Estimate and find area and perimeter of a rectangle, triangle, or irregular shape using diagrams, models, and/or by measuring.	
4.M.5	Identify and use appropriate metric and English units and tools (e.g., ruler, angle ruler, graduated cylinder, thermometer) to estimate, measure, and solve problems involving length, area, volume, weight, and/or temperature.	

Exploratory Concepts and Skills

- Develop the concepts of area and perimeter by investigating areas and perimeters of regular and irregular shapes created on a grid, coordinate grid, or geoboard.
- Use compasses to compare the perimeters and surface areas of rectangular prisms.
- Investigate the use of protractors to measure angles.
- Identify common measurements of time, e.g., 300° in one full turn, 180° in a half turn, and 90° in a quarter turn.
- Investigate areas of right triangles.
- Understand that measurements are approximations and investigate how differences in units affect precision.

Refers to standards 4.M.1 and 4.M.4

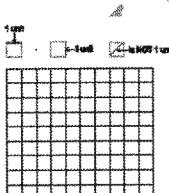
The City Park Committee wants to place in an area of the neighborhood park for young children to visit a playground. Each 10 is one square centimeter. What is the area of the shaded region?



Refers to standards 4.M.1 and 4.M.4

The City Park Committee wants to place in an area of the neighborhood park for young children to visit a playground. Each 12 sections of fence. Each section of fence is one unit long.

- On a grid (example shown below), draw 4 different closed shapes using all 12 sections of fence.
- What is the area of each of the shapes? Write the area inside each shape.
- Divide which shape would be the best one for a playground. Circle your answer. Explain why this is the best shape for a playground.



Data Analysis, Statistics, and Probability

Grades 3–4	Learning Standards	Selected Problems or Classroom Activities
	<i>Students engage in problem solving, communicating, reasoning, connecting, and representing as they:</i>	See next page for sample problems.
4.D.1	Collect and organize data using observations, measurements, surveys, or experiments, and identify appropriate ways to display the data.	
4.D.2	Match a representation of a data set such as lists, tables, or graphs (including circle graphs) with the actual set of data.	
4.D.3	Construct, draw conclusions, and make predictions from various representations of data sets, including tables, bar graphs, pictographs, line graphs, line plots, and tallyes.	
4.D.4	Represent the possible outcomes for a simple probability situation, e.g., the probability of drawing a red marble from a bag containing three red marbles and four green marbles. List and count the number of possible combinations of objects from these sets, e.g., how many different outfits can one make from a set of three shirts, a set of three skirts, and a set of two hats?	
4.D.5	Classify outcomes as certain, likely/unlikely, or impossible by designing and conducting experiments, using objects such as counters, number cubes, spinners, or coins.	

Exploratory Concepts and Skills

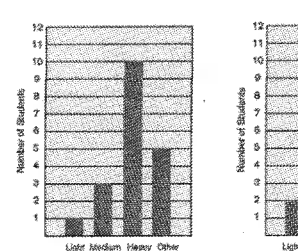
- Explore the concepts of median, mean, maximum and minimum, and range.
- Discuss what classification methods are appropriate for various types of investigations.
- Explore situations that involve probabilities of equally likely events.
- Investigate the construction of simple circle graphs.

Refers to standards 4.D.1 and 4.D.3

During a presidential campaign, various news organizations are publishing polls that try to predict the outcome of the election. Mr. Schmidt's fourth grade class talks about how much polls are needed. To be practical to ask voters "vote in the United States?" the teacher asks, "No, it would not be practical, the children agree. Counter suggests polling all the voters in our small town. Students do not think this is a good idea—or live on the East Coast, and perhaps voters in the West Coast have quite different political opinions. The class discusses how the data go about finding appropriate sample of voters.

Refers to standards 4.D.1 and 4.D.3

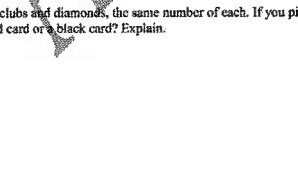
Other data about the sleeping habits of students in at least two different grades in your school. Be sure to define your terms. Develop an appropriate way to display the data and discuss conclusions drawn from it.



Refers to standard 4.D.4 and 4.D.5

There are two decks of cards. Deck 1 has only clubs, diamonds, and spades, the same number of each. If you pick one card without looking, is it more likely that you will get a red card or a black card? Explain.

Deck 2 has only clubs and diamonds, the same number of each. If you pick one without looking, is it more likely that you will get a red card or a black card? Explain.



Mathematics | Grade 4

In Grade 4, instructional time should focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

(1) Students generalize their understanding of place value to 1,000,000, understanding the relative sizes of numbers in each place. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations, in particular the distributive property, as they develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers. Depending on the numbers and the context, they select and accurately apply appropriate methods to estimate or mentally calculate products. They develop fluency with efficient procedures for multiplying whole numbers; understand and explain why the procedures work based on place value and properties of operations; and use them to solve problems. Students apply their understanding of models for division, place value, properties of operations, and the relationship of division to multiplication as they develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends. They select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context.

(2) Students develop understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., $15/9 = 5/3$), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number.

(3) Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.

Mathematical Practices

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Grade 4 Overview

Operations and Algebraic Thinking

- Use the four operations with whole numbers to solve problems.
- Gain familiarity with factors and multiples.
- Generate and analyze patterns.

Number and Operations in Base Ten

- Generalize place value understanding for multi-digit whole numbers.
- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number and Operations—Fractions

- Extend understanding of fraction equivalence and ordering.
- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.
- Understand decimal notation for fractions, and compare decimal fractions.

Measurement and Data

- Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
- Represent and interpret data.
- Geometric measurement: understand concepts of angle and measure angles.

Geometry

- Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Operations and Algebraic Thinking

4.OA

Use the four operations with whole numbers to solve problems.

- Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.
- Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.
- Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Gain familiarity with factors and multiples.

- Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.
- Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.

Generate and analyze patterns.

5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.

Number and Operations in Base Ten

4.NBT

Generalize place value understanding for multi-digit whole numbers.

- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 = 70 × 10 by recognizing that 700 is 7 tens and 0 ones.
- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- Use place value understanding to round multi-digit whole numbers to any place.

Use place value understanding and properties of operations to perform multi-digit arithmetic.

- Fluently add and subtract multi-digit whole numbers using the standard algorithm.
- Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

See Glossary, Table 2.

Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.

Number and Operations—Fractions

4.NF

Extend understanding of fraction equivalence and ordering.

- Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
- Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

- Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
 - Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Example: $5/8 = 2/8 + 3/8$; $1/8 + 7/8 = 8/8 = 1$; $1/8 + 2/8 + 5/8 = 8/8 = 1$; $1/8 + 3/8 + 4/8 = 8/8 = 1$.
 - Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.
- Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.
 - Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/6$ as the product $5 \times (1/6)$, recording the conclusion by the equation $5/6 = 5 \times (1/6)$.
 - Understand a multiple of $1/b$ as a multiple of $1/b$, and use this to multiply a fraction by a whole number. For example, use a visual fraction model to represent $3 \times (2/5) = 6/5$ or $6/5$, recognizing this product as $6/5$ (in general, $n \times (a/b) = (n \times a)/b$).
 - Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if one person has $1/2$ of a pound of roast beef, and there will be 5 people at a party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?

Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.

Understand decimal notation for fractions, and compare decimal fractions.

- Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.
- Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.
- Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.

Measurement and Data

4.MD

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

- Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; oz., lb.; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 12×12 inches is the same as 1 foot. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches using the number pairs (0, 12), (1, 12), (2, 24), (3, 36).
- Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
- Apply the area and perimeter formulas for rectangles in real-world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor. (Note: When finding areas of rectangles, regions answers will be in square units, and the perimeter of a rectangle will be in linear units. For example, the perimeter of a rectangle is 24 cm + 32 cm + 24 cm + 32 cm = 112 cm or 112 cm = 112 cm.)

Represent and interpret data.

- Make a line plot (dot plot) to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

Geometric measurement: understand concepts of angle and measure angles.

- Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.
 - An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $1/360$ of a circle is called a "one-degree angle," and can be used to measure angles.
 - An angle that turns through n one-degree angles is said to have an angle measure of n degrees.
- Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
- Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles in a diagram in real-world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.

Geometry

4.G

Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

- Draw points, lines, line segments, rays (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
- Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.
- Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Grade 4

Introduction

In Grade 4, instructional time should focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

- Students generalize their understanding of place value to 1,000,000, understanding the relative sizes of numbers in each place. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations, in particular the distributive property, as they develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers. Depending on the numbers and the context, they select and accurately apply appropriate methods to estimate or mentally calculate products. They develop fluency with efficient procedures for multiplying whole numbers; understand and explain why the procedures work based on place value and properties of operations; and use them to solve problems. Students apply their understanding of models for division, place value, properties of operations, and the relationship of division to multiplication as they develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends. They select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context.
- Students develop understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., $15/9 = 5/3$), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number.
- Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.

The Standards for Mathematical Practice complement the content standards so that students increasingly engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle, and high school years.

Grade 4 Overview

Operations and Algebraic Thinking

- Use the four operations with whole numbers to solve problems.
- Gain familiarity with factors and multiples.
- Generate and analyze patterns.

Number and Operations in Base Ten

- Generalize place value understanding for multi-digit whole numbers less than or equal to 1,000,000.
- Use place value understanding and properties of operations to perform multi-digit arithmetic on whole numbers less than or equal to 1,000,000.

Number and Operations—Fractions

- Extend understanding of fraction equivalence and ordering for fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.
- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers for fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.
- Understand decimal notation for fractions, and compare decimal fractions.

Measurement and Data

- Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
- Represent and interpret data.
- Geometric measurement: Understand concepts of angle and measure angles.

Geometry

- Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Standards for Mathematical Practice

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Grade 4 Content Standards

Operations and Algebraic Thinking

4.OA

Use the four operations with whole numbers to solve problems.

- Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.
- Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.
- Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Gain familiarity with factors and multiples.

- Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.
- Generate and analyze patterns.
 - Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.

For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.

Number and Operations in Base Ten

4.NBT

Generalize place value understanding for multi-digit whole numbers less than or equal to 1,000,000.

- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 = 70 × 10 by recognizing that 700 is 7 tens and 0 ones.
- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the

Grade 5 Standards

Curriculum for the grade 5-6 Mathematics Framework

Number Sense and Operations

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 5.N1 Demonstrate an understanding of (positive) integers and their operations.
- 5.N2 Demonstrate an understanding of (positive) integers and their operations.
- 5.N3 Represent and compare (rational) numbers in various forms, such as expanded notation without exponents, e.g., $9724 = 9 \times 1000 + 7 \times 100 + 2 \times 10 + 4$.
- 5.N4 Demonstrate an understanding of fractions as a ratio of whole numbers, as parts of a whole, as parts of a collection, and as locations on the number line. This standard is intentionally the same as standard 6.N.4.
- 5.N5 Identify and describe common equivalent fractions (with denominators 2, 4, 5, 10) and mixed numbers (with denominators 2, 4, 5, 10, decimals, and percents) in various forms, e.g., $3/4 = 0.75 = 75\%$.
- 5.N6 Find and position whole numbers, positive integers, positive whole numbers, and positive decimals on a number line.
- 5.N7 Compare and order whole numbers, positive integers, positive whole numbers, positive decimals, and percents.

- 5.N8 Apply the number theory concepts of common factor, common multiple, and divisibility rules for 2, 3, 4, and 10 to the solution of problems. Demonstrate an understanding of the concepts of prime and composite numbers.
- 5.N9 Solve problems involving multiplication and division of whole numbers, and multiplication of positive fractions with whole numbers.
- 5.N10 Demonstrate an understanding of how parentheses affect operations involving addition, subtraction, multiplication, and use the understanding to solve problems, e.g., $3 + (4 - 2) \times 3 = 4$.
- 5.N11 Demonstrate an understanding of the inverse relationship of addition and subtraction, and use the understanding to simplify complex and solve problems. This standard is intentionally the same as standard 6.N.12.
- 5.N12 Accurately and efficiently add and subtract whole numbers and positive integers, multiply and divide (using double-digit divisors) whole numbers. Multiply positive decimals with whole numbers.
- 5.N13 Accurately and efficiently add and subtract positive fractions and mixed numbers with like denominators and with unlike denominators (2, 4, 5, 10) using multiply positive fractions and mixed numbers, e.g., $1/2 + 3/4 = 5/4 = 1 \frac{1}{4}$ in terms with the numerator and denominator have 2, 4, 5, or 10 as a common factor.
- 5.N14 Estimate sums and differences of whole numbers, positive fractions, and positive decimals. Estimate products of whole numbers and products of positive decimals using a variety of strategies and judge the reasonableness of the answer.

Patterns, Relations, and Algebra Strand

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 5.P1 Analyze and describe simple patterns in numerical, symbolic, arithmetic, and geometric patterns and progressions, e.g., $ABCCBC$, 1, 5, 9, 13, 17, 21, 25.
- 5.P2 Analyze and describe simple patterns in numerical, symbolic, arithmetic, and geometric patterns and progressions, e.g., $ABCCBC$, 1, 5, 9, 13, 17, 21, 25.
- 5.P3 Use the properties of equality to solve problems with whole numbers, e.g., $87 \div 7 = 7 \text{ R } 1$ then $7 \times 12 = 84$, therefore $84 \div 7 = 12$, then $84 \div 7 = 12$, therefore $84 \div 7 = 12$.
- 5.P4 Represent and discuss mathematical relationships with concrete models, tables, graphs, and rules in words and with symbols, e.g., $2x + 3 = 15$, then $2x = 12$, therefore $x = 6$.
- 5.P5 Solve problems involving proportional relationships using concrete models, tables, graphs, and rules in words and with symbols, e.g., $2x + 3 = 15$, then $2x = 12$, therefore $x = 6$.
- 5.P6 Interpret graphs that represent the relationship between two variables in everyday situations.

Geometry Strand

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 5.G1 Identify, describe, and compare special types of triangles (equilateral, isosceles, right, and scalene), quadrilaterals (square, rectangle, parallelogram, rhombus, trapezoid), e.g., recognize that all interior angles in a square are right angles and that all interior angles in a rectangle are right angles.
- 5.G2 Identify, describe, and compare special types of three-dimensional shapes (cube, prism, sphere, pyramid) based on their properties, such as edges and faces.
- 5.G3 Identify relationships among two-dimensional shapes, e.g., rectangle, parallelogram, trapezoid.
- 5.G4 Using ordered pairs of whole numbers, plot points on a coordinate plane, and describe paths on the Cartesian coordinate plane.
- 5.G5 Describe and perform transformations on two-dimensional shapes, e.g., translations, rotations, and reflections.

- 5.G6 Identify and describe line symmetry in two-dimensional shapes, including shapes that have multiple lines of symmetry.
- 5.G7 Determine if two triangles are congruent or similar by measuring sides or corresponding angles and angles, or by using a variety of methods, e.g., translation, rotation, and reflection.

Measurement Strand

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 5.M1 Apply the concepts of perimeter and area to the solution of problems involving rectangles and squares. Apply formulas where appropriate.
- 5.M2 Identify, measure, describe, classify, and draw various measures of length, area, and angle, and the angle between them, or given two angles and the side between them, e.g., draw a triangle with one right angle and two acute angles.
- 5.M3 Solve problems involving simple unit conversions within a system of measurement.
- 5.M4 Find volume and surface area of rectangular prisms.
- 5.M5 Find the sum of the measures of interior angles in triangles by measuring the angles, and without measuring the angles.

Data Analysis, Statistics, and Probability Strand

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- 5.D1 Given a set of data, find the mean, median, mode, maximum, minimum, and range, and apply to solutions of problems.
- 5.D2 Construct and interpret line plots, bar graphs, and bar graphs. Interpret and label circle graphs.
- 5.D3 Produce the probability of outcomes of simple experiments (e.g., tossing a coin, rolling a number cube) and test the predictions.

Number Sense and Operations

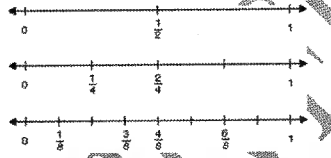
Learning Standards	Selected Problems or Classroom Activities
Students engage in problem solving, communicating, reasoning, connecting, and representing as they:	See next page for sample problems.
5.N1 Demonstrate an understanding of (positive) integers and their operations.	
5.N2 Demonstrate an understanding of (positive) integers and their operations.	
5.N3 Represent and compare (rational) numbers in various forms, such as expanded notation without exponents, e.g., $9724 = 9 \times 1000 + 7 \times 100 + 2 \times 10 + 4$.	
5.N4 Demonstrate an understanding of fractions as a ratio of whole numbers, as parts of a whole, as parts of a collection, and as locations on the number line.	
5.N5 Identify and describe common equivalent fractions (with denominators 2, 4, 5, 10) and mixed numbers (with denominators 2, 4, 5, 10, decimals, and percents).	
5.N6 Find and position integers, fractions, mixed numbers, and decimals (both positive and negative) on the number line.	
5.N7 Compare and order integers (including negative integers) and positive fractions, mixed numbers, decimals, and percents.	
5.N8 Apply number theory concepts—finding prime factors, composite numbers, prime factorizations, least common factor, least common multiple, and divisibility rules for 2, 3, 4, 5, 6, 9, and 10—to the solution of problems.	
5.N9 Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and use the understanding to solve problems, e.g., $3 + (4 - 2) \times 3 = 4$.	
5.N10 Demonstrate an understanding of the inverse relationship of addition and subtraction, and use the understanding to simplify complex and solve problems.	
5.N11 Accurately and efficiently add, subtract, multiply, and divide (with double-digit divisors) whole numbers and positive decimals.	
5.N12 Accurately and efficiently add, subtract, multiply, and divide positive fractions and mixed numbers. Simplify fractions.	
5.N13 Add and subtract integers, with the exception of subtracting negative integers.	
5.N14 Estimate results of computations with whole numbers, and with positive fractions, mixed numbers, decimals, and percents. Describe reasonableness of estimates.	

Exploratory Concepts and Skills

- ✓ Explore the addition and subtraction of positive and negative fractions.
- ✓ Investigate the distributive property of multiplication over addition for double-digit multipliers, e.g., $12 \times (10 + 3) = 12 \times 10 + 12 \times 3$.

Refer to standards 6.N.4, 6.N.5, and 6.N.7

Fill in the missing fractions.



- Refer to standard 6.N.4
- Suppose that when a positive number is divided by 7, the result is a , and when the same number is divided by 8, the result is b . How do a and b compare?
- a. $a < b$
- b. $a > b$
- c. $a = b$
- d. It depends on the number.

Patterns, Relations, and Algebra

Learning Standards	Selected Problems or Classroom Activities
Students engage in problem solving, communicating, reasoning, connecting, and representing as they:	See next page for sample problems.
5.P1 Analyze and describe simple patterns in numerical, symbolic, arithmetic, and geometric patterns and progressions, e.g., $ABCCBC$, 1, 5, 9, 13, 17, 21, 25.	
5.P2 Analyze and describe simple patterns in numerical, symbolic, arithmetic, and geometric patterns and progressions, e.g., $ABCCBC$, 1, 5, 9, 13, 17, 21, 25.	
5.P3 Use the properties of equality to solve problems with whole numbers, e.g., $87 \div 7 = 7 \text{ R } 1$ then $7 \times 12 = 84$, therefore $84 \div 7 = 12$, then $84 \div 7 = 12$, therefore $84 \div 7 = 12$.	
5.P4 Represent real situations and mathematical relationships with concrete models, tables, graphs, and rules in words and with symbols, e.g., $2x + 3 = 15$, then $2x = 12$, therefore $x = 6$.	
5.P5 Solve linear equations using concrete models, tables, graphs, and paper-pencil methods.	
5.P6 Produce and interpret graphs that represent the relationship between two variables in everyday situations.	
5.P7 Identify and describe relationships between variables with a constant rate of change. Contrast these with relationships where the rate of change is not constant.	

Exploratory Concepts and Skills

- ✓ Use physical models to investigate and describe how a change in one variable affects a second variable.
- ✓ Use models to develop an understanding of slope as constant rate of change.
- ✓ Model situations with proportional relationships and solve problems.

Refer to standard 6.P.1

Triangles and trapezoids were used to make a pattern.

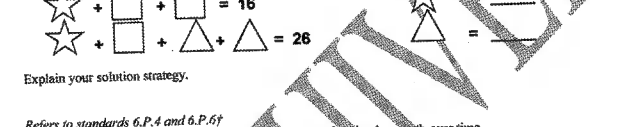
Level 1:

Level 2:

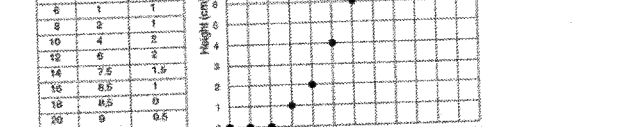
Level 3:

Refer to standards 6.P.2, 6.P.3, and 6.P.5

Based on the data in the table, create a graph that shows the plant's growth over time.



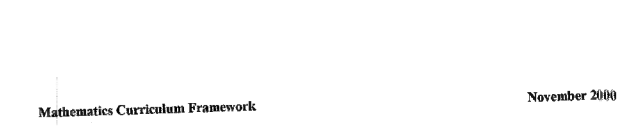
Time (days)	Height (cm)	Change (cm)
0	0	0
4	1	1
8	2	1
12	3	1
16	4	1
20	5	1
24	6	1



Explain your solution strategy.

Refer to standards 6.P.4 and 6.P.5

Based on the data in the table, create a graph that shows the plant's growth over time.



Time (days)	Height (cm)	Change (cm)
0	0	0
4	1	1
8	2	1
12	3	1
16	4	1
20	5	1
24	6	1



Mathematics Curriculum Framework

November 2008

Mathematics | Grade 5

In Grade 5, instructional time should focus on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

- (1) Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators. They develop fluency in calculating sums and differences of fractions, and make reasonable estimates of their results. Students also use the meaning of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.)
- (2) Students develop understanding of why division procedures work based on the meaning of basic facts, numerals, and properties of operations. They finalize fluency with multi-digit addition, subtraction, multiplication, and division. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations, and make reasonable estimates of their results. Students use the relationship between decimal and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately.
- (3) Students recognize volume as an attribute of three-dimensional space. They understand that volume can be measured by finding the total number of unit cubes that would be required to fill the space. For example, a unit cube is the standard unit for measuring volume. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume. They decompose three-dimensional shapes and find volumes of right rectangular prisms by viewing them as composed into layers of arrays of cubes. They measure necessary attributes of shapes in order to determine volume to solve real-world and mathematical problems.

Grade 5 Overview

Operations and Algebraic Thinking

- Write and interpret numerical expressions.
- Analyze patterns and relationships.

Number and Operations in Base Ten

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

Number and Operations—Fractions

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Measurement and Data

- Convert like measurement units within a given measurement system.
- Represent and interpret data.
- Geometric measurement: understand concepts of volume and relate volume to multiplication and to division.

Geometry

- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.

Mathematical Practices

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Grade 5 Overview

Introduction

In Grade 5, instructional time should focus on four critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of measurement systems and determining volume to solve problems; and (4) solving problems using the coordinate plane.

- Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop fluency in calculating sums and differences of fractions, and make reasonable estimates of their results. Students also use the meaning of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.)
- Students develop understanding of why division procedures work based on the meaning of basic facts, numerals, and properties of operations. They finalize fluency with multi-digit multiplication, and division. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations and make reasonable estimates of their results. Students use the relationship between decimal and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately.
- Students convert among different-sized measurement units within a given measurement system allowing for efficient and accurate problem solving with multi-step real-world problems as they progress in their understanding of scientific concepts and calculations. Students recognize volume as an attribute of three-dimensional space. They understand that volume can be measured by finding the total number of unit cubes that would be required to fill the space without gaps or overlaps. They understand that a unit cube is the standard unit for measuring volume. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume. They decompose three-dimensional shapes and find volumes of right rectangular prisms by viewing them as composed into layers of arrays of cubes. They measure necessary attributes of shapes in order to determine volume to solve real-world and mathematical problems.
- Students learn to interpret the components of a rectangular coordinate system as lines and understand the precision of location that these lines require. Students learn to apply their knowledge of number and length to the order and distance relationships of a coordinate grid and to coordinate this across two dimensions. Students solve mathematical and real-world problems using coordinates.

The Standards for Mathematical Practice complement the content standards so that students increasingly engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle, and high school years.

Grade 5 Overview

Operations and Algebraic Thinking

- Write and interpret numerical expressions.
- Analyze patterns and relationships.

Number and Operations in Base Ten

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

Number and Operations—Fractions

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Measurement and Data

- Convert like measurement units within a given measurement system.
- Represent and interpret data.
- Geometric measurement: Understand concepts of volume and relate volume to multiplication and to division.

Geometry

- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.

Standards for Mathematical Practice

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Operations and Algebraic Thinking

Write and interpret numerical expressions.

- Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$. Recognize that $3 \times (2892 \div 12)$ is three times as large as $2892 \div 12$, without having to calculate the indicated sum or product.

Analyze patterns and relationships.

- Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.

Number and Operations in Base Ten

Understand the place value system.

- Recognize that a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.
- Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
- Read, write, and compare decimals to thousandths.

- Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times 1/10 + 9 \times 1/100 + 2 \times 1/1000$.
- Compare two decimals based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- Use place value understanding to round decimals to any place.

- Perform operations with multi-digit whole numbers and with decimals to hundredths.
- Fluently multiply multi-digit whole numbers using the standard algorithm.
- Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on the value, properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

- Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Number and Operations—Fractions

- Use equivalent fractions as a strategy to add and subtract fractions.
- Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent fraction with a denominator that is a common multiple of the original denominators. For example, $2/5 + 1/4 = 8/20 + 5/20 = 13/20$. (In general, $a/b + c/d = ad/bd + cd/bd$.)

- Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $2/5 + 1/2 = 3/7$ by observing that $3/7 < 1/2$.

- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
- Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 4 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?

- Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
- Interpret the product ($a \times b$) as a parts of a partition of a into b equal parts; equivalently, as the result of a sequence of operations $a \times q = p$ where p is a part of a . For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for the equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)

- Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths by visual models, rectangles, and represent fraction products as rectangular areas.

- Interpret multiplication as scaling (resizing), by:
 - Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
 - Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (a \times c)/(b \times c)$ to the effect of multiplying a/b by c .

- Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.

- Interpret division of a unit fraction by a non-zero whole number, and recognize that dividing a unit fraction by a whole number gives a unit fraction of the original denominator, e.g., $(1/5) \div 3 = 1/15$, and recognize that dividing a whole number by a unit fraction gives a whole number multiple of the original denominator, e.g., $4 \div (1/5) = 20$, because $20 \times (1/5) = 4$.

- Convert like measurement units within a given measurement system. For example, convert 5 cm to 0.05 m, and use these conversions in solving multi-step, real-world problems.

- Represent and interpret data.
- Make a line plot to display a data set of measurements in fractions of a unit ($1/2, 1/4, 1/8$). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.

- Geometric measurement: understand concepts of volume and relate volume to multiplication and to division.
- Recognize volume as an attribute of solid figures and understand concepts of volume measurement.

- A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.
- A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.

- Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
- Relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume.

- Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by using a unit fraction of the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.

- Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems.

- Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real-world problems.

Geometry

- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to

Kindergarten Reading Standards

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Kindergarten Reading Standards for Literature [RL]

Key Ideas and Details

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, retell familiar stories, including key details.

For example, after hearing their teacher read and show the illustrations in Gerald McDermott's picture book version of a traditional African tale, Anansi the Spider, students retell the folktale about the clever spider Anansi and draw pictures to illustrate characters and their interactions at important points in the story. (RL.K.2, RL.K.3, W.K.3)

3. With prompting and support, identify characters, settings, and major events in a story.

Craft and Structure

4. Ask and answer questions about unknown words in a text. (See kindergarten Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Recognize common types of texts and characteristics of their structure (e.g., story elements in books; rhyme, rhythm, and repetition in poems).
For example, students read with their teacher two texts about foods that are made, eaten, and enjoyed all around the world: pancakes. The two texts are Tomie DePaola's book Pancakes for Breakfast and Christina Rossetti's poem "Mix a Pancake." After discussing the two texts, students explain how they knew from the structure of each work that the first text was a story and the second a poem. (RL.K.5, SL.K.1)
6. With prompting and support, explain that reading the cover or title page is how to find out who created a book; name the author and illustrator of a book and define the role of each in telling the story.

Integration of Knowledge and Ideas

7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).
8. (Not applicable.)
9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

Range of Reading and Level of Text Complexity

10. Actively engage in group reading activities with purpose and understanding.

Kindergarten Reading Standards for Informational Text [RI]

Key Ideas and Details

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, identify the main topic and retell key details of a text.
3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

Craft and Structure

4. With prompting and support, ask and answer questions about unknown words in a text. (See kindergarten Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Identify the front cover, back cover, and title page of a book.
6. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in the text.

Integration of Knowledge and Ideas

7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
For example, students study the life cycles of plants and animals. Read-alouds from books such as One Bean by Anne Rockwell, From Seed to Plant by Gail Gibbons, and A Tree Is a Plant by Clyde Robert Bulla introduce students to core science concepts and vocabulary through illustrations and words. Students draw, dictate, and write observations in science journals. (RI.K.2, RI.K.4, RI.K.7, SL.K.5, LK.K.6)
8. With prompting and support, identify the reasons an author gives to support points in a text.
9. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

Range of Reading and Level of Text Complexity

10. Actively engage in group reading activities with purpose and understanding.

Reading Standards for Literature K–5

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Kindergartners:		Grade 1 students:	
Key Ideas and Details			
1.	With prompting and support, ask and answer questions about key details in a text.	1.	Ask and answer questions about key details in a text.
2.	With prompting and support, retell familiar stories, including key details.	2.	Retell stories, including key details, and demonstrate understanding of their central message or lesson.
3.	With prompting and support, identify characters, settings, and major events in a story.	3.	Describe characters, settings, and major events in a story, using key details.
Craft and Structure			
4.	Ask and answer questions about unknown words in a text.	4.	Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.
5.	Recognize common types of texts (e.g., storybooks, poems).	5.	Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.
6.	With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.	6.	Identify who is telling the story at various points in a text.
Integration of Knowledge and Ideas			
7.	With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).	7.	Use illustrations and details in a story to describe its characters, setting, or events.
8.	(Not applicable to literature)	8.	(Not applicable to literature)
9.	With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.	9.	Compare and contrast the adventures and experiences of characters in stories.
Range of Reading and Level of Text Complexity			
10.	Actively engage in group reading activities with purpose and understanding.	10.	With prompting and support, read prose and poetry of appropriate complexity for grade 1.

DING LITERATURE

Reading Standards for Informational Text K–5

Kindergartners:		Grade 1 students:	
Key Ideas and Details			
1.	With prompting and support, ask and answer questions about key details in a text.	1.	Ask and answer questions about key details in a text.
2.	With prompting and support, identify the main topic and retell key details of a text.	2.	Identify the main topic and retell key details of a text.
3.	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.	3.	Describe the connection between two individuals, events, ideas, or pieces of information in a text.
Craft and Structure			
4.	With prompting and support, ask and answer questions about unknown words in a text.	4.	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
5.	Identify the front cover, back cover, and title page of a book.	5.	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
6.	Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.	6.	Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
Integration of Knowledge and Ideas			
7.	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).	7.	Use the illustrations and details in a text to describe its key ideas.
8.	With prompting and support, identify the reasons an author gives to support points in a text.	8.	Identify the reasons an author gives to support points in a text.
9.	With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	9.	Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
Range of Reading and Level of Text Complexity			
10.	Actively engage in group reading activities with purpose and understanding.	10.	With prompting and support, read informational texts appropriately complex for grade 1.

ADING INFORMATIONAL TEXT

Reading Standards: Foundational Skills (K–5)

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. These foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: good readers will need much less practice with these concepts than struggling readers will. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Note: In kindergarten, children are expected to demonstrate increasing awareness and competence in the areas that follow.

Kindergartners:		Grade 1 students:	
Print Concepts			
1.	Demonstrate understanding of the organization and basic features of print. a. Follow words from left to right, top to bottom, and page by page. b. Recognize that spoken words are represented in written language by specific sequences of letters. c. Understand that words are separated by spaces in print. d. Recognize and name all upper- and lowercase letters of the alphabet.	1.	Demonstrate understanding of the organization and basic features of print. a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).
Phonological Awareness			
2.	Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Recognize and produce rhyming words. b. Count, pronounce, blend, and segment syllables in spoken words. c. Blend and segment onsets and rimes of single-syllable spoken words. d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. ^a (This does not include CVCs ending with /l/, /r/, or /x/.) e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.	2.	Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Distinguish long from short vowel sounds in spoken single-syllable words. b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends. c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).

^aWords, syllables, or phonemes written in /slashes/ refer to their pronunciation or phonology. Thus, /CVC/ is a word with three phonemes regardless of the number of letters in the spelling of the word.

Reading Standards: Foundational Skills (K–5)

Note: In kindergarten children are expected to demonstrate increasing awareness and competence in the

Kindergartners:		Grade 1 students:	
Phonics and Word Recognition			
3.	Know and apply grade-level phonics and word analysis skills in decoding words. a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary sound or many of the most frequent sounds for each consonant. b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels. c. Read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does). d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.	3.	Know and apply grade-level phonics and word analysis skills in decoding words. a. Know the spelling-sound correspondences for common consonant digraphs. b. Decode regularly spelled one-syllable words. c. Know final -e and common vowel team conventions for representing long vowel sounds. d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word. e. Decode two-syllable words following basic patterns by breaking the words into syllables. f. Read words with inflectional endings. g. Recognize and read grade-appropriate irregularly spelled words.
Fluency			
4.	Read emergent-reader texts with purpose and understanding.	4.	Read with sufficient accuracy and fluency to support comprehension. a. Read grade-level text with purpose and understanding. b. Read grade-level text orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

K-5 | READING: FOUNDATIONAL SKILLS

Grade 1 Reading Standards

Grade 1 Reading Standards for Literature [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Key Ideas and Details

1. Ask and answer questions about key details in a text.
2. Retell stories, including key details, and demonstrate understanding of their central message or lesson.
3. Describe characters, settings, and major events in a story, using key details.

Craft and Structure

4. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses. (See grade 1 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Identify characteristics of common types of stories, including folktales and fairy tales.
For example, in a study of folktales as a genre, students listen to and read along with the teacher the traditional poem, "The Fox's Foray," noting the repetition, rhythm, and rhyme. After performing a choral reading of another version of the poem, "The Fox Went Out One Chilly Night," they read more traditional tales featuring foxes and write opinion pieces about the character of the fox in the tales they have read. (RL.1.5, RL.1.9, W.1.1, L.1.6)
6. Identify who is telling the story at various points in a text.

Integration of Knowledge and Ideas

7. Use illustrations and details in a story to describe its characters, setting, or events.
8. (Not applicable. For expectations regarding central messages or lessons in stories, see RL.2.)
9. Compare and contrast the adventures and experiences of characters in stories.
For example, students read or listen to audiobooks of several picture books by one author/illustrator, such as Beatrix Potter, Dr. Seuss, William Steig, Eric Carle, Ezra Jack Keats, Jerry Pinkney, or Mo Willems, and make a list of the similarities they notice in the books. (RL.1.9, W.1.10)

Range of Reading and Level of Text Complexity

10. With prompting and support, read and comprehend literary texts representing a variety of genres, cultures, and perspectives and exhibiting complexity appropriate for at least grade 1. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 1 Reading Standards for Informational Text [RI]

Key Ideas and Details

1. Ask and answer questions about key details in a text.
2. Identify the main topic and retell key details of a text.
3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.
Students read and listen to the teacher read biographies of individuals who were courageous in the pursuit of justice for a variety of reasons throughout United States history. Among the books read are Elizabeth Leads the Way (about Elizabeth Cady Stanton) by Margot Theis Raven, Side by Side: the Story of Dolores Huerta and Carlos Chávez by Monica Brown, Jackie Robinson by Wil Mara, and Ruby Bridges by Robert Coles. After reading these true stories, students write their own biography of a person who worked for justice. (RI.1.3, W.1.2, W.1.3)

Craft and Structure

4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. (See grade 1 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

Integration of Knowledge and Ideas

7. Use the illustrations and details in a text to describe its key ideas.
8. Identify the reasons an author gives to support points in a text.
9. Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

Range of Reading and Level of Text Complexity

10. With prompting and support, read and comprehend informational texts exhibiting complexity appropriate for at least grade 1. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 1 Reading Standards for Foundational Skills [RF]

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. A research- and evidence-based scope and sequence for phonological and phonics development and the complete range of foundational skills are not ends in and of themselves. They are necessary and important components of an effective, comprehensive reading curriculum designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: as students become skilled readers, they will need much less practice with these concepts. Struggling readers may need more or different kinds of practice. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Print Concepts

1. Demonstrate understanding of the organization and basic features of print.
a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

Phonological Awareness

2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
a. Distinguish long from short vowel sounds in spoken single-syllable words.
b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends.
c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.
d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).

Phonics and Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words.
a. Know the spelling-sound correspondences for common consonant digraphs.
b. Decode regularly spelled one-syllable words.
c. Know final -e and common vowel team conventions for representing long vowel sounds.
d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.
e. Decode two-syllable words following basic patterns by breaking the words into syllables.
f. Read words with inflectional endings.
g. Recognize and read grade-appropriate irregularly spelled words.

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
a. Read grade-level text with purpose and understanding.
b. Read grade-level text orally with accuracy, appropriate rate, and expression on successive readings.
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Grade 2 Reading Standards

Grade 2 Reading Standards for Literature [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Key Ideas and Details

1. Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details in a text.
2. Retell stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.
3. Describe how characters in a story respond to major events and challenges.

Craft and Structure

4. Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song. (See grade 2 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
For example, students learn the traditional nursery rhyme "As I was going to St. Ives" and point out how its repetitions of sounds affect the meaning and help them find the answer to the mathematical puzzle posed by the speaker in the poem. (RL.2.1, RL.2.4)
5. Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.
6. Explain what dialogue is and how it can reveal characters' thoughts and perspectives.

Integration of Knowledge and Ideas

7. Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.
8. (Not applicable. For expectations regarding central messages, lessons, or morals in stories, see RL.2.)
9. Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend literary texts representing a variety of genres, cultures, and perspectives and exhibiting complexity appropriate for at least grade 2. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 2 Reading Standards for Informational Text [RI]

Key Ideas and Details

1. Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details in a text.
2. Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.
3. Describe the connection between a series of historical events, scientific ideas or concepts, mathematical ideas or concepts, or steps in technical procedures in a text.

For example, as they are learning to subtract numbers within 1,000 in math, students read Shark Swinathon by Stuart Murphy and use mathematical reasoning to keep track of how many laps the shark swim team members swim each in order to predict whether or not the sharks will make their goal.

Craft and Structure

4. Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*. (See grade 2 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
6. Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

Integration of Knowledge and Ideas

7. Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
For example, in a social studies unit on understanding the information in different types of maps and how to use a world atlas, students compare the physical geography of North America and Africa. They interpret maps and read how geography influenced the life of a Kenyan woman who used her knowledge to restore fertility to the land. Among the books they read at different levels of complexity are Wangari's Trees of Peace: A True Story from Africa by Jeanette Winter, Seeds of Change: Wangari's Gift to the World by Jen Cullerton Johnson, and Planting the Trees of Kenya, the Story of Wangari Maathai by Claire Nivola. (RI.2.1, RI.2.7, SL.2.1)
8. Describe how reasons support specific points the author makes in a text.
9. Compare and contrast the most important points presented by two texts on the same topic.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend informational texts, including history/social studies, science, mathematical, and technical texts, exhibiting complexity appropriate for at least grade 2. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 2 Reading Standards for Foundational Skills [RF]

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. A research- and evidence-based scope and sequence for phonological and phonics development and the complete range of foundational skills are not ends in and of themselves. They are necessary and important components of an effective, comprehensive reading curriculum designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: as students become skilled readers, they will need much less practice with these concepts. Struggling readers may need more or different kinds of practice. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Note: RF.1 and RF.2, on print concepts and phonological awareness, apply only to pre-kindergarten, kindergarten, and grade 1.

Phonics and Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words.
 - a. Distinguish long and short vowels when reading regularly spelled one-syllable words.
 - b. Know spelling-sound correspondences for additional common vowel teams.
 - c. Decode regularly spelled two-syllable words with long vowels.
 - d. Decode words with common prefixes and suffixes.
- e. Identify words with inconsistent but common spelling-sound correspondences.
- f. Recognize and read grade-appropriate irregularly spelled words.

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
 - a. Read grade-level text with purpose and understanding.
 - b. Read grade-level text orally with accuracy, appropriate rate, and expression on successive readings.
 - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

G.2 Reading Standards for Literature K–5

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Reading Standards for Literature

Grade 2 students:
Key Ideas and Details
1. Ask and answer such questions as <i>who</i> , <i>what</i> , <i>where</i> , <i>when</i> , <i>why</i> , and <i>how</i> to demonstrate understanding of key details in a text.
2. Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.
3. Describe how characters in a story respond to major events and challenges.
Craft and Structure
4. Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.
5. Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.
6. Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.
Integration of Knowledge and Ideas
7. Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.
8. (Not applicable to literature)
9. Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.
Range of Reading and Level of Text Complexity
10. By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Grade 3 students:
Key Ideas and Details
1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
2. Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.
3. Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
Craft and Structure
4. Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.
5. Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.
6. Distinguish their own point of view from that of the narrator or those of the characters.
Integration of Knowledge and Ideas
7. Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).
8. (Not applicable to literature)
9. Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).
Range of Reading and Level of Text Complexity
10. By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.

Reading Standards for Informational Text K–5

Grade 2 students:
Key Ideas and Details
1. Ask and answer such questions as <i>who</i> , <i>what</i> , <i>where</i> , <i>when</i> , <i>why</i> , and <i>how</i> to demonstrate understanding of key details in a text.
2. Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.
3. Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
Craft and Structure
4. Determine the meaning of words and phrases in a text relevant to a <i>grade 2 topic or subject area</i> .
5. Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
6. Identify the main purpose of a text, including what the author wants to answer, explain, or describe.
Integration of Knowledge and Ideas
7. Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
8. Describe how reasons support specific points the author makes in a text.
9. Compare and contrast the most important points presented by two texts on the same topic.
Range of Reading and Level of Text Complexity
10. By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Grade 3 students:
Key Ideas and Details
1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
2. Determine the main idea of a text; recount the key details and explain how they support the main idea.
3. Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
Craft and Structure
4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a <i>grade 3 topic or subject area</i> .
5. Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.
6. Distinguish their own point of view from that of the author of a text.
Integration of Knowledge and Ideas
7. Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
8. Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).
9. Compare and contrast the most important points and key details presented in two texts on the same topic.
Range of Reading and Level of Text Complexity
10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.

G.2 Reading Standards: Foundational Skills (K–5)

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. These foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and of an effective, comprehensive reading program designed to develop proficient readers will. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Reading Standards: Foundational Skills (K–5)

Grade 2 students:
Phonics and Word Recognition
3. Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> a. Distinguish long and short vowels when reading regularly spelled one-syllable words. b. Know spelling-sound correspondences for additional common vowel teams. c. Decode regularly spelled two-syllable words with long vowels. d. Decode words with common prefixes and suffixes. e. Identify words with inconsistent but common spelling-sound correspondences. f. Recognize and read grade-appropriate irregularly spelled words.
Fluency
4. Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> a. Read grade-level text with purpose and understanding. b. Read grade-level text orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Grade 3 students:
Phonics and Word Recognition
3. Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> a. Identify and know the meaning of the most common prefixes and derivational suffixes. b. Decode words with common Latin suffixes. c. Decode multisyllable words. d. Read grade-appropriate irregularly spelled words.
Fluency
4. Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> a. Read grade-level text with purpose and understanding. b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Grade 3 Reading Standards

Grade 3 Reading Standards for Literature [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Key Ideas and Details

1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
2. Retell stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in a text.
For example, students read versions of classic fables attributed to Aesop, discussing how the stories can be told differently, yet have the same moral. Then they read a collection of modern fables, told mostly in dialogue, by Arnold Lobel. Students practice reading the fables aloud in pairs to develop fluency and expression, and then write a script from a fable to perform. By the end of the unit, students can explain what fables are, why they have endured over thousands of years, and how they reflect human experience. (RL.3.2, RL.3.9, RF.3.4, W.3.10, L.3.6)
3. Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text, distinguishing literal from figurative language. (See grade 3 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Identify common structural elements of fiction (e.g., problem, solution); describe how each successive part of a text builds on earlier sections.
6. Distinguish their own point of view from that of a text's narrator or those of its characters.

Integration of Knowledge and Ideas

7. Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).
8. (Not applicable. For expectations regarding central messages, lessons, or morals in stories, see RL.2.)
9. Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend literary texts representing a variety of genres, cultures, and perspectives and exhibiting complexity appropriate for at least grade 3. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 3 Reading Standards for Informational Text [RI]

Key Ideas and Details

1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
2. Determine the main idea of a text; recount the key details and explain how they support the main idea.
3. Describe the relationship between a series of historical events, scientific ideas or concepts, mathematical ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

Craft and Structure

4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area*. (See grade 3 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.
For example, students study the characteristics and text features of informational text. Then they develop a research question about a topic of interest, conduct research to locate information, and write a report that uses the text features they have studied—such as a table of contents, headings and subheadings, informative illustrations, an index, and a glossary. (RI.3.5, W.3.2, W.3.7)
6. Distinguish their own point of view from that of the author of a text.

Integration of Knowledge and Ideas

7. Use information gained from illustrations (e.g., maps, photographs) and the words, numbers, and symbols in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
Connections to the Standards for Mathematical Practice
2. Reason abstractly and quantitatively.
6. Attend to precision.
See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.
8. Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).
9. Compare and contrast the most important points and key details presented in two texts on the same topic.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend informational texts, including history/social studies, science, mathematical, and technical texts, exhibiting complexity appropriate for at least grade 3. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 3 Reading Standards for Foundational Skills [RF]

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. A research- and evidence-based scope and sequence for phonological and phonics development and the complete range of foundational skills are not ends in and of themselves. They are necessary and important components of an effective, comprehensive reading curriculum designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: as students become skilled readers, they will need much less practice with these concepts. Struggling readers may need more or different kinds of practice. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Note: RF.1 and RF.2, on print concepts and phonological awareness, apply only to pre-kindergarten, kindergarten, and grade 1.

Phonics and Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words.
 - a. Identify and know the meaning of the most common prefixes and derivational suffixes.
 - b. Decode words with common Latin suffixes.
 - c. Decode multisyllable words.
 - d. Read grade-appropriate irregularly spelled words.

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
 - a. Read grade-level text with purpose and understanding.
 - b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
 - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Grade 4 Reading Standards

Grade 4 Reading Standards for Literature [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Key Ideas and Details

1. Refer to details and examples in a text when explaining what the text states explicitly and when drawing inferences from the text.
For example, students read Natalie Babbitt's novel Tuck Everlasting and select paragraphs and sentences in the novel in which the reader is given hints about the mysterious qualities of the spring water that has given eternal life to the members of the Tuck family. They pay particular attention to how Babbitt's use of metaphors and images gives richness to the text. (RL.4.1, RL.4.2, RL.4.4, L.4.5)
2. Determine a theme of a story, drama, or poem from details in the text; summarize a text.
3. Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., *Herculean*); explain how figurative language (e.g., simile, metaphor) enriches a text. (See grade 4 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Explain major differences among prose, poetry, and drama and refer to the structural elements of each (e.g., paragraphs and chapters for prose; stanza and verse for poetry; scene, stage directions, cast of characters for drama) when writing or speaking about a text.
6. Compare and contrast the points of view from which different stories are narrated, including the difference between first- and third-person narrations.

Integration of Knowledge and Ideas

7. Make connections between a written story or drama and its visual or oral presentation, identifying where the presentation reflects specific descriptions and directions in the written text.
8. (Not applicable. For expectations regarding themes in literary texts, see RL.2.)
9. Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend literary texts representing a variety of genres, cultures, and perspectives and exhibiting complexity appropriate for at least grade 4. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 4 Reading Standards for Informational Text [RI]

Key Ideas and Details

1. Refer to details and examples in a text when explaining what the text states explicitly and when drawing inferences from the text.
2. Determine the main idea of a text and explain how it is supported by key details; summarize a text.
For example, students read parts of I, Columbus, a retelling of entries from Columbus's journal of 1492-93 by Peter and Connie Roop. In pairs, they summarize important facts about Columbus's voyage, arrival, search for gold, failure to understand the treasures on the islands, and return to Spain. They use what they have learned to write reports, which they display in the library. (RI.4.2, W.4.2, W.4.4)
3. Explain events, procedures, ideas, or concepts in a historical, scientific, mathematical, or technical text, including what happened and why, based on specific information in the text.

Craft and Structure

4. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*. (See grade 4 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
6. Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

Integration of Knowledge and Ideas

7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on webpages) and explain how the information contributes to an understanding of the text in which it appears.
Connections to the Standards for Mathematical Practice
2. Reason abstractly and quantitatively.
6. Attend to precision.
See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.
For example, as they are learning about fractions in math, students view an episode of the PBS math series Cyberchase. Characters in the episode must use their knowledge of equivalent fractions to sort through crystals to find the one that contains the most orange. After students view the video, they explain what the characters did to solve the problem, and how the visual models in the animation clarified what equivalent fractions are.
8. Explain how an author uses reasons and evidence to support particular points in a text.
9. Integrate information from two texts on the same topic in order to write or speak knowledgeably about the subject.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend informational texts, including history/social studies, science, mathematical, and technical texts, exhibiting complexity appropriate for at least grade 4. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 4 Reading Standards for Foundational Skills [RF]

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. A research- and evidence-based scope and sequence for phonological and phonics development and the complete range of foundational skills are not ends in and of themselves. They are necessary and important components of an effective, comprehensive reading curriculum designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: as students become skilled readers, they will need much less practice with these concepts. Struggling readers may need more or different kinds of practice. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Note: RF.1 and RF.2, on print concepts and phonological awareness, apply only to pre-kindergarten, kindergarten, and grade 1.

Phonics and Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words.
 - a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
 - a. Read grade-level text with purpose and understanding.
 - b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
 - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Reading Standards for Literature K–5

	Grade 4 students:	Grade 5 students:
Key Ideas and Details		
1.	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
2.	Determine a theme of a story, drama, or poem from details in the text; summarize the text.	2. Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
3.	Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).	3. Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).
Craft and Structure		
4.	Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., <i>Herculean</i>).	4. Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.
5.	Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.	5. Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
6.	Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.	6. Describe how a narrator's or speaker's point of view influences how events are described.
Integration of Knowledge and Ideas		
7.	Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.	7. Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).
8.	(Not applicable to literature)	8. (Not applicable to literature)
9.	Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.	9. Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.

Range of Reading and Level of Text Complexity

10. By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
10. By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.

Reading Standards for Informational Text K–5

	Grade 4 students:	Grade 5 students:
Key Ideas and Details		
1.	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
2.	Determine the main idea of a text and explain how it is supported by key details; summarize the text.	2. Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
3.	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	3. Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
Craft and Structure		
4.	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a <i>grade 4 topic or subject area</i> .	4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a <i>grade 5 topic or subject area</i> .
5.	Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.	5. Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
6.	Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.	6. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
Integration of Knowledge and Ideas		
7.	Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.	7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
8.	Explain how an author uses reasons and evidence to support particular points in a text.	8. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
9.	Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	9. Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
Range of Reading and Level of Text Complexity		
10.	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.

Reading Standards: Foundational Skills (K–5)

	Grade 4 students:	Grade 5 students:
Phonics and Word Recognition		
3.	Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. 	3. Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
Fluency		
4.	Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> a. Read grade-level text with purpose and understanding. b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary. 	4. Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> a. Read grade-level text with purpose and understanding. b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Grade 5 Reading Standards

Grade 5 Reading Standards for Literature [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Key Ideas and Details

1. Quote or paraphrase a text accurately when explaining what the text states explicitly and when drawing inferences from the text. (See grade 5 Writing Standard 8 for more on paraphrasing.)
2. Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize a text.
For example, students explore the theme "Heroism demands courage and taking risks" in traditional tales such as The Merry Adventures of Robin Hood by Howard Pyle and modern novels such as Bud, Not Buddy by Christopher Paul Curtis.
3. Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text; identify and explain the effects of figurative language such as metaphors and similes. (See grade 5 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
6. Describe how a narrator's or speaker's point of view influences how events are described in a story, myth, poem, or drama.

Integration of Knowledge and Ideas

7. Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel; multimedia presentation of fiction, folktale, myth, poem).
8. (Not applicable. For expectations regarding themes in literary texts, see RL.2.)
9. Compare and contrast stories in the same genre (e.g., mysteries or adventure stories) on their approaches to similar themes and topics.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend literary texts representing a variety of genres, cultures, and perspectives and exhibiting complexity appropriate for at least grade 5. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 5 Reading Standards for Informational Text [RI]

Key Ideas and Details

1. Quote or paraphrase a text accurately when explaining what the text states explicitly and when drawing inferences from the text. (See grade 5 Writing Standard 8 for more on paraphrasing.)
2. Determine one or more main ideas of a text and explain how they are supported by key details; summarize a text.
3. Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, mathematical, or technical text based on specific information in the text.
For example, in a social studies unit, students examine the expedition of Lewis and Clark. They analyze primary and secondary sources to determine the historical importance of the journey of the Corps of Discovery, and to build understanding that there can be multiple perspectives on historical events. (RI.5.3, RI.5.6, RI.5.7)

Craft and Structure

4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*. (See grade 5 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Describe how an author uses one or more structures (e.g., chronology, comparison, cause/effect, problem/solution) of events, to present information in a text.
6. Analyze multiple accounts of the same event or topic, noting important similarities and differences among the points of view they represent.

Integration of Knowledge and Ideas

7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
Connections to the Standards for Mathematical Practice
2. Reason abstractly and quantitatively.
6. Attend to precision.
See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.
8. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
9. Integrate information from several texts on the same topic in order to write or speak knowledgeably about the subject.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend informational texts, including history/social studies, science, mathematical, and technical texts, exhibiting complexity appropriate for at least grade 5. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 5 Reading Standards for Foundational Skills [RF]

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. A research- and evidence-based scope and sequence for phonological and phonics development and the complete range of foundational skills are not ends in and of themselves. They are necessary and important components of an effective, comprehensive reading curriculum designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: as students become skilled readers, they will need much less practice with these concepts. Struggling readers may need more or different kinds of practice. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Note: RF.1 and RF.2, on print concepts and phonological awareness, apply only to pre-kindergarten, kindergarten, and grade 1.

Phonics and Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words.
 - a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
 - a. Read grade-level text with purpose and understanding.
 - b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
 - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Kindergarten Reading Standards

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Kindergarten Reading Standards for Literature [RL]

Key Ideas and Details

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, retell familiar stories, including key details.

For example, after hearing their teacher read and show the illustrations in Gerald McDermott's picture book version of a traditional African tale, Anansi the Spider, students retell the folktale about the clever spider Anansi and draw pictures to illustrate characters and their interactions at important points in the story. (RL.K.2, RL.K.3, W.K.3.)

3. With prompting and support, identify characters, settings, and major events in a story.

Craft and Structure

4. Ask and answer questions about unknown words in a text. (See kindergarten Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Recognize common types of texts and characteristics of their structure (e.g., story elements in books; rhyme, rhythm, and repetition in poems).
For example, students read with their teacher two texts about foods that are made, eaten, and enjoyed all around the world: pancakes. The two texts are Tomie DePaola's book Pancakes for Breakfast and Christina Rossetti's poem "Mix a Pancake." After discussing the two texts, students explain how they knew from the structure of each work that the first text was a story and the second a poem. (RL.K.5, SL.K.1.)
6. With prompting and support, explain that reading the cover or title page is how to find out who created a book; name the author and illustrator of a book and define the role of each in telling the story.

Integration of Knowledge and Ideas

7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).
8. (Not applicable.)
9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

Range of Reading and Level of Text Complexity

10. Actively engage in group reading activities with purpose and understanding.

Kindergarten Reading Standards for Informational Text [RI]

Key Ideas and Details

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, identify the main topic and retell key details of a text.
3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

Craft and Structure

4. With prompting and support, ask and answer questions about unknown words in a text. (See kindergarten Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Identify the front cover, back cover, and title page of a book.
6. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in the text.

Integration of Knowledge and Ideas

7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
For example, students study the life cycles of plants and animals. Read-alouds from books such as One Bean by Anne Rockwell, From Seed to Plant by Gail Gibbons, and A Tree Is a Plant by Clyde Robert Bulla introduce students to core science concepts and vocabulary through illustrations and words. Students draw, dictate, and write observations in science journals. (RI.K.2, RI.K.4, RI.K.6, RI.K.7, SL.K.5, LK.6.)
8. With prompting and support, identify the reasons an author gives to support points in a text.
9. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

Range of Reading and Level of Text Complexity

10. Actively engage in group reading activities with purpose and understanding.

Reading Standards for Literature K–5

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Kindergartners:		Grade 1 students:	
Key Ideas and Details			
1.	With prompting and support, ask and answer questions about key details in a text.	1.	Ask and answer questions about key details in a text.
2.	With prompting and support, retell familiar stories, including key details.	2.	Retell stories, including key details, and demonstrate understanding of their central message or lesson.
3.	With prompting and support, identify characters, settings, and major events in a story.	3.	Describe characters, settings, and major events in a story, using key details.
Craft and Structure			
4.	Ask and answer questions about unknown words in a text.	4.	Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.
5.	Recognize common types of texts (e.g., storybooks, poems).	5.	Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.
6.	With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.	6.	Identify who is telling the story at various points in a text.
Integration of Knowledge and Ideas			
7.	With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).	7.	Use illustrations and details in a story to describe its characters, setting, or events.
8.	(Not applicable to literature)	8.	(Not applicable to literature)
9.	With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.	9.	Compare and contrast the adventures and experiences of characters in stories.
Range of Reading and Level of Text Complexity			
10.	Actively engage in group reading activities with purpose and understanding.	10.	With prompting and support, read prose and poetry of appropriate complexity for grade 1.

READING: LITERATURE

Reading Standards for Informational Text K–5

Kindergartners:		Grade 1 students:	
Key Ideas and Details			
1.	With prompting and support, ask and answer questions about key details in a text.	1.	Ask and answer questions about key details in a text.
2.	With prompting and support, identify the main topic and retell key details of a text.	2.	Identify the main topic and retell key details of a text.
3.	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.	3.	Describe the connection between two individuals, events, ideas, or pieces of information in a text.
Craft and Structure			
4.	With prompting and support, ask and answer questions about unknown words in a text.	4.	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
5.	Identify the front cover, back cover, and title page of a book.	5.	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
6.	Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.	6.	Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
Integration of Knowledge and Ideas			
7.	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).	7.	Use the illustrations and details in a text to describe its key ideas.
8.	With prompting and support, identify the reasons an author gives to support points in a text.	8.	Identify the reasons an author gives to support points in a text.
9.	With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	9.	Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
Range of Reading and Level of Text Complexity			
10.	Actively engage in group reading activities with purpose and understanding.	10.	With prompting and support, read informational texts appropriately complex for grade 1.

READING: INFORMATIONAL TEXT

Reading Standards: Foundational Skills (K–5)

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. These foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: good readers will need much less practice with these concepts than struggling readers will. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Note: In kindergarten, children are expected to demonstrate increasing awareness and competence in the areas that follow.

Kindergartners:		Grade 1 students:	
Print Concepts			
1.	Demonstrate understanding of the organization and basic features of print. a. Follow words from left to right, top to bottom, and page by page. b. Recognize that spoken words are represented in written language by specific sequences of letters. c. Understand that words are separated by spaces in print. d. Recognize and name all upper- and lowercase letters of the alphabet.	1.	Demonstrate understanding of the organization and basic features of print. a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).
Phonological Awareness			
2.	Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Recognize and produce rhyming words. b. Count, pronounce, blend, and segment syllables in spoken words. c. Blend and segment onsets and rimes of single-syllable spoken words. d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. ^a (This does not include CVCs ending with /l/, /r/, or /x/.) e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.	2.	Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Distinguish long from short vowel sounds in spoken single-syllable words. b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends. c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).

^aWords, syllables, or phonemes written in /slashes/ refer to their pronunciation or phonology. Thus, /CVC/ is a word with three phonemes regardless of the number of letters in the spelling of the word.

Reading Standards: Foundational Skills (K–5)

Note: In kindergarten children are expected to demonstrate increasing awareness and competence in the

Kindergartners:		Grade 1 students:	
Phonics and Word Recognition			
3.	Know and apply grade-level phonics and word analysis skills in decoding words. a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary sound or many of the most frequent sounds for each consonant. b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels. c. Read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does). d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.	3.	Know and apply grade-level phonics and word analysis skills in decoding words. a. Know the spelling-sound correspondences for common consonant digraphs. b. Decode regularly spelled one-syllable words. c. Know final -e and common vowel team conventions for representing long vowel sounds. d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word. e. Decode two-syllable words following basic patterns by breaking the words into syllables. f. Read words with inflectional endings. g. Recognize and read grade-appropriate irregularly spelled words.
Fluency			
4.	Read emergent-reader texts with purpose and understanding.	4.	Read with sufficient accuracy and fluency to support comprehension. a. Read grade-level text with purpose and understanding. b. Read grade-level text orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

16 | K-5 | READING: FOUNDATIONAL SKILLS

Grade 1 Reading Standards

Grade 1 Reading Standards for Literature [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Key Ideas and Details

1. Ask and answer questions about key details in a text.
2. Retell stories, including key details, and demonstrate understanding of their central message or lesson.
3. Describe characters, settings, and major events in a story, using key details.

Craft and Structure

4. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses. (See grade 1 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Identify characteristics of common types of stories, including folktales and fairy tales.
For example, in a study of folktales as a genre, students listen to and read along with the teacher the traditional poem, "The Fox's Foray," noting the repetition, rhythm, and rhyme. After performing a choral reading of another version of the poem, "The Fox Went Out One Chilly Night," they read more traditional tales featuring foxes and write opinion pieces about the character of the fox in the tales they have read. (RL.1.5, RL.1.9, W.1.1, L.1.6.)
6. Identify who is telling the story at various points in a text.

Integration of Knowledge and Ideas

7. Use illustrations and details in a story to describe its characters, setting, or events.
8. (Not applicable. For expectations regarding central messages or lessons in stories, see RL.2.)
9. Compare and contrast the adventures and experiences of characters in stories.
For example, students read or listen to audiobooks of several picture books by one author/illustrator, such as Beatrix Potter, Dr. Seuss, William Steig, Eric Carle, Ezra Jack Keats, Jerry Pinkney, or Mo Willems, and make a list of the similarities they notice in the books. (RL.1.9, W.1.10.)

Range of Reading and Level of Text Complexity

10. With prompting and support, read and comprehend literary texts representing a variety of genres, cultures, and perspectives and exhibiting complexity appropriate for at least grade 1. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 1 Reading Standards for Informational Text [RI]

Key Ideas and Details

1. Ask and answer questions about key details in a text.
2. Identify the main topic and retell key details of a text.
3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.
Students read and listen to the teacher read biographies of individuals who were courageous in the pursuit of justice for a variety of reasons throughout United States history. Among the books read are Elizabeth Leads the Way (about Elizabeth Cady Stanton) by Margot Theis Raven, Side by Side: the Story of Dolores Huerta and Carlos Chavez by Monica Brown, Jackie Robinson by Wil Mera, and Ruby Bridges by Robert Coles. After reading these true stories, students write their own biography of a person who worked for justice. (RI.1.3, W.1.2, W.1.3.)

Craft and Structure

4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. (See grade 1 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

Integration of Knowledge and Ideas

7. Use the illustrations and details in a text to describe its key ideas.
8. Identify the reasons an author gives to support points in a text.
9. Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

Range of Reading and Level of Text Complexity

10. With prompting and support, read and comprehend informational texts exhibiting complexity appropriate for at least grade 1. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 1 Reading Standards for Foundational Skills [RF]

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. A research- and evidence-based scope and sequence for phonological and phonics development and the complete range of foundational skills are not ends in and of themselves. They are necessary and important components of an effective, comprehensive reading curriculum designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: as students become skilled readers, they will need much less practice with these concepts. Struggling readers may need more or different kinds of practice. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Print Concepts

1. Demonstrate understanding of the organization and basic features of print.
a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

Phonological Awareness

2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
a. Distinguish long from short vowel sounds in spoken single-syllable words.
b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends.
c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.
d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).

Phonics and Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words.
a. Know the spelling-sound correspondences for common consonant digraphs.
b. Decode regularly spelled one-syllable words.
c. Know final -e and common vowel team conventions for representing long vowel sounds.
d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.
e. Decode two-syllable words following basic patterns by breaking the words into syllables.
f. Read words with inflectional endings.
g. Recognize and read grade-appropriate irregularly spelled words.

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
a. Read grade-level text with purpose and understanding.
b. Read grade-level text orally with accuracy, appropriate rate, and expression on successive readings.
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Grade 4 Reading Standards

Grade 4 Reading Standards for Literature [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Key Ideas and Details

1. Refer to details and examples in a text when explaining what the text states explicitly and when drawing inferences from the text.
For example, students read Natalie Babbitt's novel Tuck Everlasting and select paragraphs and sentences in the novel in which the reader is given hints about the mysterious qualities of the spring water that has given eternal life to the members of the Tuck family. They pay particular attention to how Babbitt's use of metaphors and images gives richness to the text. (RL.4.1, RL.4.2, RL.4.4, L.4.5)
2. Determine a theme of a story, drama, or poem from details in the text; summarize a text.
3. Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., *Herculean*); explain how figurative language (e.g., simile, metaphor) enriches a text. (See grade 4 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Explain major differences among prose, poetry, and drama and refer to the structural elements of each (e.g., paragraphs and chapters for prose; stanza and verse for poetry; scene, stage directions, cast of characters for drama) when writing or speaking about a text.
6. Compare and contrast the points of view from which different stories are narrated, including the difference between first- and third-person narrations.

Integration of Knowledge and Ideas

7. Make connections between a written story or drama and its visual or oral presentation, identifying where the presentation reflects specific descriptions and directions in the written text.
8. (Not applicable. For expectations regarding themes in literary texts, see RL.2.)
9. Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend literary texts representing a variety of genres, cultures, and perspectives and exhibiting complexity appropriate for at least grade 4. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 4 Reading Standards for Informational Text [RI]

Key Ideas and Details

1. Refer to details and examples in a text when explaining what the text states explicitly and when drawing inferences from the text.
2. Determine the main idea of a text and explain how it is supported by key details; summarize a text.
For example, students read parts of I, Columbus, a retelling of entries from Columbus's journal of 1492-93 by Peter and Connie Roop. In pairs, they summarize important facts about Columbus's voyage, arrival, search for gold, failure to understand the treasures on the islands, and return to Spain. They use what they have learned to write reports, which they display in the library. (RI.4.2, W.4.2, W.4.4)
3. Explain events, procedures, ideas, or concepts in a historical, scientific, mathematical, or technical text, including what happened and why, based on specific information in the text.

Craft and Structure

4. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*. (See grade 4 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
6. Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

Integration of Knowledge and Ideas

7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on webpages) and explain how the information contributes to an understanding of the text in which it appears.
Connections to the Standards for Mathematical Practice
2. Reason abstractly and quantitatively.
6. Attend to precision.
See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.
For example, as they are learning about fractions in math, students view an episode of the PBS math series Cyberchase. Characters in the episode must use their knowledge of equivalent fractions to sort through crystals to find the one that contains the most orange. After students view the video, they explain what the characters did to solve the problem, and how the visual models in the animation clarified what equivalent fractions are.
8. Explain how an author uses reasons and evidence to support particular points in a text.
9. Integrate information from two texts on the same topic in order to write or speak knowledgeably about the subject.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend informational texts, including history/social studies, science, mathematical, and technical texts, exhibiting complexity appropriate for at least grade 4. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 4 Reading Standards for Foundational Skills [RF]

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. A research- and evidence-based scope and sequence for phonological and phonics development and the complete range of foundational skills are not ends in and of themselves. They are necessary and important components of an effective, comprehensive reading curriculum designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: as students become skilled readers, they will need much less practice with these concepts. Struggling readers may need more or different kinds of practice. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Note: RF.1 and RF.2, on print concepts and phonological awareness, apply only to pre-kindergarten, kindergarten, and grade 1.

Phonics and Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words.
 - a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
 - a. Read grade-level text with purpose and understanding.
 - b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
 - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Reading Standards for Literature K–5

RL

	Grade 4 students:	Grade 5 students:
Key Ideas and Details		
1.	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
2.	Determine a theme of a story, drama, or poem from details in the text; summarize the text.	2. Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
3.	Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).	3. Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).
Craft and Structure		
4.	Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., <i>Herculean</i>).	4. Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.
5.	Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.	5. Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
6.	Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.	6. Describe how a narrator's or speaker's point of view influences how events are described.
Integration of Knowledge and Ideas		
7.	Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.	7. Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).
8.	(Not applicable to literature)	8. (Not applicable to literature)
9.	Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.	9. Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.
Range of Reading and Level of Text Complexity		
10.	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.

Reading Standards for Informational Text K–5

RI

	Grade 4 students:	Grade 5 students:
Key Ideas and Details		
1.	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
2.	Determine the main idea of a text and explain how it is supported by key details; summarize the text.	2. Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
3.	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	3. Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
Craft and Structure		
4.	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a <i>grade 4 topic or subject area</i> .	4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a <i>grade 5 topic or subject area</i> .
5.	Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.	5. Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
6.	Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.	6. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
Integration of Knowledge and Ideas		
7.	Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.	7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
8.	Explain how an author uses reasons and evidence to support particular points in a text.	8. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
9.	Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	9. Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
Range of Reading and Level of Text Complexity		
10.	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.

Reading Standards: Foundational Skills (K–5)

RF

	Grade 4 students:	Grade 5 students:
Phonics and Word Recognition		
3.	Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. 	3. Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
Fluency		
4.	Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> a. Read grade-level text with purpose and understanding. b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary. 	4. Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> a. Read grade-level text with purpose and understanding. b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Grade 5 Reading Standards

Grade 5 Reading Standards for Literature [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Key Ideas and Details

1. Quote or paraphrase a text accurately when explaining what the text states explicitly and when drawing inferences from the text. (See grade 5 Writing Standard 8 for more on paraphrasing.)
2. Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize a text.
For example, students explore the theme "Heroism demands courage and taking risks" in traditional tales such as The Merry Adventures of Robin Hood by Howard Pyle and modern novels such as Bud, Not Buddy by Christopher Paul Curtis.
3. Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text; identify and explain the effects of figurative language such as metaphors and similes. (See grade 5 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
6. Describe how a narrator's or speaker's point of view influences how events are described in a story, myth, poem, or drama.

Integration of Knowledge and Ideas

7. Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel; multimedia presentation of fiction, folktale, myth, poem).
8. (Not applicable. For expectations regarding themes in literary texts, see RL.2.)
9. Compare and contrast stories in the same genre (e.g., mysteries or adventure stories) on their approaches to similar themes and topics.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend literary texts representing a variety of genres, cultures, and perspectives and exhibiting complexity appropriate for at least grade 5. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 5 Reading Standards for Informational Text [RI]

Key Ideas and Details

1. Quote or paraphrase a text accurately when explaining what the text states explicitly and when drawing inferences from the text. (See grade 5 Writing Standard 8 for more on paraphrasing.)
2. Determine **one** or more main ideas of a text and explain how they are supported by key details; summarize a text.
3. Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, mathematical, or technical text based on specific information in the text.
For example, in a social studies unit, students examine the expedition of Lewis and Clark. They analyze primary and secondary sources to determine the historical importance of the journey of the Corps of Discovery, and to build understanding that there can be multiple perspectives on historical events. (RI.5.3, RI.5.6, RI.5.7)

Craft and Structure

4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*. (See grade 5 Language Standards 4–6 on applying knowledge of vocabulary to reading.)
5. Describe how an author uses one or more structures (e.g., chronology, comparison, cause/effect, problem/solution) of events, to present information in a text.
6. Analyze multiple accounts of the same event or topic, noting important similarities and differences among the points of view they represent.

Integration of Knowledge and Ideas

7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
Connections to the Standards for Mathematical Practice
2. Reason abstractly and quantitatively.
6. Attend to precision.
See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.
8. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
9. Integrate information from several texts on the same topic in order to write or speak knowledgeably about the subject.

Range of Reading and Level of Text Complexity

10. Independently and proficiently read and comprehend informational texts, including history/social studies, science, mathematical, and technical texts, exhibiting complexity appropriate for at least grade 5. (See [more on qualitative and quantitative dimensions of text complexity](#).)

Grade 5 Reading Standards for Foundational Skills [RF]

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. A research- and evidence-based scope and sequence for phonological and phonics development and the complete range of foundational skills are not ends in and of themselves. They are necessary and important components of an effective, comprehensive reading curriculum designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: as students become skilled readers, they will need much less practice with these concepts. Struggling readers may need more or different kinds of practice. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

Note: RF.1 and RF.2, on print concepts and phonological awareness, apply only to pre-kindergarten, kindergarten, and grade 1.

Phonics and Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words.
 - a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
 - a. Read grade-level text with purpose and understanding.
 - b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
 - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Kindergarten Writing Standards [W]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* The expected growth in student writing ability is reflected both in the standards themselves and in the collections of annotated student writing samples in [Appendix C of the Common Core State Standards](#) and the [Massachusetts Writing Standards in Action Project](#).

Text Types and Purposes

Note: The intent of Writing Standards 1–3 is to ensure flexibility, not rigidity, in student writing. Many effective pieces of writing blend elements of more than one text type in service of a single purpose: for example, an argument may rely on anecdotal evidence, a short story may function to explain some phenomenon, or a literary analysis may use explication to develop an argument. In addition, each of the three types of writing is itself a broad category encompassing a variety of texts: for example, narrative poems, short stories, and memoirs represent three distinct forms of narrative writing. Finally, although the bulk of writing assigned in school should address the purposes described below, other forms of writing—for example, lists and notes, descriptive letters, personal reflections—should have a place in the classroom as well. To develop flexibility and nuance in their own writing, students need to engage with a wide range of complex model texts (see Reading Literature Standard 10 and Reading Informational Text Standard 10) and study authors who have written successfully across genres (see [Appendix B: A Literary Heritage](#)).

1. Use a combination of drawing, dictating, and writing to compose opinion pieces that tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., *My favorite book is...*).
2. Use a combination of drawing, dictating, and writing to compose informative/explanatory texts that name and supply some information about a topic.
How do you play football? A student explains it all in this illustrated how-to book created during a unit on informational writing. See "How to Play Football," a kindergarten writing sample, Massachusetts Writing Standards in Action. (W.K.2, L.K.3, L.K.2)
3. Use a combination of drawing, dictating, and writing to narrate a single event or experience, or several loosely linked events or experiences; sequence the narrative appropriately and provide a reaction to what it describes.
 - a. For poems, use rhyming words to create structure. (See kindergarten Reading Foundational skills Standard 2a.)*A kindergartner tells the story, in pictures and words, of everything that happened on a night at an aunt's house. See "Auntie and Me," a kindergarten personal narrative writing sample, Massachusetts Writing Standards in Action. (W.K.2, W.K.3, W.K.5, L.K.1, L.K.2, L.K.5, L.K.6)*

Production and Distribution of Writing

4. (Begins in grade 1.)
5. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.
 - a. (Begins in grade 3.)
 - b. Demonstrate the ability to use vocabulary appropriate for kindergarten (as described in kindergarten Language Standards 4–6).
6. With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including collaboration with peers.

Research to Build and Present Knowledge

7. Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).
8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
9. (Begins in grade 4.)

Range of Writing

10. Write or dictate writing routinely for a range of tasks, purposes, and audiences.

Kindergarten Speaking and Listening Standards [SL]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Comprehension and Collaboration

1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
 - a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).
 - b. Continue a conversation through multiple exchanges.
2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Presentation of Knowledge and Ideas

4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
5. Add drawings or other visual displays to descriptions as desired to provide additional detail.
6. Speak audibly and express thoughts, feelings, and ideas clearly.
For example, pairs of students make audio recordings of poems in which each child speaks alternate lines or verses. They listen to the recordings and decide whether both voices are clear, sufficiently loud, and easy to understand.

Kindergarten Language Standards [L]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. For example, though sentence fragments may receive the most attention in grade 4, more nuanced discussions of the topic should develop throughout the later grades as students continue to analyze speakers' and authors' sentence structure, vary syntax for effect in their own speaking and writing, and more.*

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking; retain and further develop language skills learned previously.
Sentence Structure and Meaning
 - a. Demonstrate the ability to produce and expand complete sentences using frequently occurring nouns, pronouns, adjectives, verbs, question words, and prepositions; name and use in context numbers 0–100 (see kindergarten mathematics standards for Counting and Cardinality).
 - b. Form questions that seek additional information, rather than a simple yes/no answer.*Word Usage*
 - a. Form regular plural nouns orally by adding /s/ or /es/.*For example, students make an illustrated list of plural nouns that end just in "s"—cats, boats, cars—and those that need "es"—classes, bushes, boxes. (W.K.10, L.K.1)*
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Print upper- and lowercase letters.
 - b. Capitalize the first word in a sentence and the pronoun I.
 - c. Recognize and name end punctuation.
 - d. Write a letter or letters for most consonant and short-vowel sounds (phonemes).
 - e. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.
 - f. Write numbers 0–20 (see kindergarten mathematics standards for Counting and Cardinality).

Knowledge of Language

3. (Begins in grade 2.)

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
 - a. Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb *to duck*).
5. With guidance and support from adults, explore word relationships and nuances in word meanings.
 - a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
 - b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).
 - c. Identify real-life connections between words and their use (e.g., note places at school that are *colorful*).
 - d. Distinguish shades of meaning among verbs describing the same general action (e.g., *walk, march, strut, prance*) by acting out the meanings.
6. Use words and phrases acquired through conversations, activities in the kindergarten curriculum, reading and being read to, and responding to texts.
For example, students use targeted academic vocabulary for mathematics—count, add, more, counting on, number, put together, number sentence, equal to, equal sign—to ask or answer questions about addition. Later, in a lesson introducing subtraction, the teacher reads the picture book Ten Little Monkeys Jumping on the Bed, by Annie Kubler, to engage students in the process of making sense of subtraction as taking away: "Eight little monkeys jumping on the bed, one fell off and then there were..." Based on story prompts, students are guided to represent subtraction situations with actions, fingers, drawings, and numbers.
Connections to the Standards for Mathematical Practice
 - a. Attend to precision
See the [pre-K–5 resource section in this Framework](#) or the Massachusetts Curriculum Framework for Mathematics.

Writing Standards K–5

The following standards for K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* The expected growth in student writing ability is reflected both in the standards themselves and in the collection of annotated student writing samples in [Appendix C](#).

Kindergartners:		Grade 1 students:	
Text Types and Purposes			
1.	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., <i>My favorite book is...</i>).	1.	Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.
2.	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	2.	Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.
3.	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.	3.	Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.
Production and Distribution of Writing			
4.	(Begins in grade 3)	4.	(Begins in grade 3)
5.	With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.	5.	With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.
6.	With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.	6.	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
Research to Build and Present Knowledge			
7.	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).	7.	Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).
8.	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	8.	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
9.	(Begins in grade 4)	9.	(Begins in grade 4)
Range of Writing			
10.	(Begins in grade 3)	10.	(Begins in grade 3)

Speaking and Listening Standards K–5

The following standards for K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Kindergartners:		Grade 1 students:	
Comprehension and Collaboration			
1.	Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. <ol style="list-style-type: none">a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).b. Continue a conversation through multiple exchanges.	1.	Participate in collaborative conversations with diverse partners about <i>grade 1 topics and texts</i> with peers and adults in small and larger groups. <ol style="list-style-type: none">a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.c. Ask questions to clear up any confusion about the topics and texts under discussion.
2.	Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.	2.	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
3.	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	3.	Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
Presentation of Knowledge and Ideas			
4.	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	4.	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
5.	Add drawings or other visual displays to descriptions as desired to provide additional detail.	5.	Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
6.	Speak audibly and express thoughts, feelings, and ideas clearly.	6.	Produce complete sentences when appropriate to task and situation. (See grade 1 Language standards 1 and 3 on page 26 for specific expectations.)

Language Standards K–5

The following standards for grades K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and grades as they are applied to increasingly sophisticated writing and speaking are marked with an asterisk (*). See the table on page 30 for a complete list and Appendix A for an example of how these skills develop in sophistication.*

Kindergartners:		Grade 1 students:	
Conventions of Standard English			
1.	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none">a. Print many upper- and lowercase letters.b. Use frequently occurring nouns and verbs.c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., <i>dog, dogs; wish, wishes</i>).d. Understand and use question words (interrogatives) (e.g., <i>who, what, where, when, why, how</i>).e. Use the most frequently occurring prepositions (e.g., <i>to, from, in, out, on, off, for, of, by, with</i>).f. Produce and expand complete sentences in shared language activities.	1.	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none">a. Print all upper- and lowercase letters.b. Use common, proper, and possessive nouns.c. Use singular and plural nouns with matching verbs in basic sentences (e.g., <i>He hops; We hop</i>).d. Use personal, possessive, and indefinite pronouns (e.g., <i>I, me, my; they, them, their; anyone, everything</i>).e. Use verbs to convey a sense of past, present, and future (e.g., <i>Yesterday I walked home; Today I walk home; Tomorrow I will walk home</i>).f. Use frequently occurring adjectives.g. Use frequently occurring conjunctions (e.g., <i>and, but, or, so, because</i>).h. Use determiners (e.g., articles, demonstratives).i. Use frequently occurring prepositions (e.g., <i>during, beyond, toward</i>).j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.
2.	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none">a. Capitalize the first word in a sentence and the pronoun I.b. Recognize and name end punctuation.c. Write a letter or letters for most consonant and short-vowel sounds (phonemes).d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.	2.	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none">a. Capitalize dates and names of people.b. Use end punctuation for sentences.c. Use commas in dates and to separate single words in a series.d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.
Knowledge of Language			
3.	(Begins in grade 2)	3.	(Begins in grade 2)
Vocabulary Acquisition and Use			
4.	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>kindergarten reading and content</i> . <ol style="list-style-type: none">a. Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb <i>to duck</i>).b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed, -s, re-, un-, pre-, -ful, -less</i>) as a clue to the meaning of an unknown word.	4.	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 1 reading and content</i> , choosing flexibly from an array of strategies. <ol style="list-style-type: none">a. Use sentence-level context as a clue to the meaning of a word or phrase.b. Use frequently occurring affixes as a clue to the meaning of a word.c. Identify frequently occurring root words (e.g., <i>look</i>) and their inflectional forms (e.g., <i>looks, looked, looking</i>).
5.	With guidance and support from adults, explore word relationships and nuances in word meanings. <ol style="list-style-type: none">a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).c. Identify real-life connections between words and their use (e.g., note places at school that are <i>colorful</i>).d. Distinguish shades of meaning among verbs describing the same general action (e.g., <i>walk, march, strut, prance</i>) by acting out the meanings.	5.	With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. <ol style="list-style-type: none">a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.b. Define words by category and by one or more key attributes (e.g., a <i>duck</i> is a bird that swims; a <i>tiger</i> is a large cat with stripes).c. Identify real-life connections between words and their use (e.g., note places at home that are cozy).d. Distinguish shades of meaning among verbs differing in manner (e.g., <i>look, peek, glance, stare, glare, scowl</i>) and adjectives differing in intensity (e.g., <i>large, gigantic</i>) by defining or choosing them or by acting out the meanings.
6.	Use words and phrases acquired through conversations, reading and being read to, and responding to texts.	6.	Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., <i>because</i>).

Grade 1 Writing Standards [W]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* The expected growth in student writing ability is reflected both in the standards themselves and in the collections of annotated student writing samples in [Appendix C of the Common Core State Standards](#) and the [Massachusetts Writing Standards in Action Project](#).

Text Types and Purposes

Note: The intent of Writing Standards 1–3 is to ensure flexibility, not rigidity, in student writing. Many effective pieces of writing blend elements of more than one text type in service of a single purpose: for example, an argument may rely on anecdotal evidence, a short story may function to explain some phenomenon, or a literary analysis may use explication to develop an argument. In addition, each of the three types of writing is itself a broad category encompassing a variety of texts: for example, narrative poems, short stories, and memoirs represent three distinct forms of narrative writing. Finally, although the bulk of writing assigned in school should address the purposes described below, other forms of writing—for example, lists and notes, descriptive letters, personal reflections—should have a place in the classroom as well. To develop flexibility and nuance in their writing, students need to engage with a wide range of complex model texts (see Reading Literature Standard 10 and Reading Informational Text Standard 10) and study authors who have written successfully across genres (see [Appendix B: A Literary Heritage](#)).

1. Write opinion pieces that introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.
"Legos are great toys," writes a first grader. "Keep reading and find out why." With detailed drawings and expressive language to support an opinion, a student makes the case for what one can build with these blocks and a little imagination. See "Legos," an opinion/argument essay (W.1.1, W.1.5, L.1.1, L.1.2, L.1.6). Another student writes a restaurant review, stating an opinion about a favorite place to eat out, including recommended dishes. See "Ponoro Bread," a sample first grade opinion/argument essay (W.1.1, W.1.5, W.1.8, L.1.1, L.1.2, L.1.5) Massachusetts Writing Standards in Action.
In math, instead of writing opinions, students write or draw solutions to math word problems and present arguments to explain their thinking.
Connections to the Standards for Mathematical Practice
 2. Reason abstractly and quantitatively.
 3. Construct viable arguments and respond to the reasoning of others.
See the [pre-K–5 resource section in this Framework](#) or the Massachusetts Curriculum Framework for Mathematics.
2. Write informative/explanatory texts that name a topic, supply some facts about the topic, and provide some sense of closure.
A student introduces a distinct topic, explains facts about it, provides an emphatic closure, and maintains a formal tone in "Weather in the Polar Region," an informational essay, Massachusetts Writing Standards in Action. (W.1.2, W.1.5, W.1.8, L.1.1, L.1.2)
3. Write narratives in prose or poem form that recount two or more appropriately sequenced events or experiences, include some details about what happened or was experienced, use temporal words to signal order where appropriate, and provide some sense of closure.
 - a. For poems, use rhyming words and words that repeat long or short vowel sounds to create structure (see grade 1 Reading Foundational Skills Standard 2a).

Production and Distribution of Writing

4. Produce writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Standards 1–3 above.)
5. With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.
 - a. (Begins in grade 3.)
 - b. Demonstrate the ability to choose and use appropriate vocabulary (as described in Language Standards 4–6 up to and including grade 1).
6. With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

Research to Build and Present Knowledge

7. Participate in shared research and writing projects (e.g., explore a number of how-to books on a given topic and use them to write a sequence of instructions).
8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
For example, in science, students explore sources of light and how light is important. They investigate how shadows are made and look at reflections using mirrors to redirect a light beam. They write and perform skits to explain what they have learned about the interaction of light and materials. (W.1.2, W.1.8, Science Standards)
9. (Begins in grade 4.)

Range of Writing

10. Write routinely for a range of tasks, purposes, and audiences.

Grade 1 Speaking and Listening Standards [SL]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Comprehension and Collaboration

1. Participate in collaborative conversations with diverse partners about *grade 1 topics and texts* with peers and adults in small and larger groups.
 - a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
 - b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
 - c. Ask questions to clear up any confusion about the topics and texts under discussion.
For example, students explore the theme, "A true friend helps us when we are in trouble," in poems, pictures, and stories and discuss the examples in small groups, where they practice listening and building on one another's ideas. (SL.1.2, SL.1.1)
Connections to the Standards for Mathematical Practice
 2. Reason abstractly and quantitatively.
 3. Construct viable arguments and respond to the reasoning of others.
See the [pre-K–5 resource section in this Framework](#) or the Massachusetts Curriculum Framework for Mathematics.
2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

Presentation of Knowledge and Ideas

4. Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly and using appropriate vocabulary. (See grade 1 Language Standards 4–6 for specific expectations regarding vocabulary.)
5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
6. Produce complete sentences when appropriate to task and situation. (See grade 1 Language Standard 1 for specific expectations.)

Grade 1 Language Standards [L]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. For example, though sentence fragments may receive the most attention in grade 4, more nuanced discussions of the topic should develop throughout the later grades as students continue to analyze speakers' and authors' sentence structure, vary syntax for effect in their own speaking and writing, and more.*

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking; retain and further develop language skills learned in previous grades.
Sentence Structure and Meaning
 - a. Produce and expand simple and compound sentences.
 - b. Demonstrate understanding that a question is a type of sentence.
 - c. Use singular and plural nouns with matching verbs in basic sentences.
 - d. Use verbs in sentences to convey a sense of past, present, and future.*Word Usage*
 - a. Use common, proper, and possessive nouns.
 - b. Use personal, possessive, and indefinite pronouns.
 - c. Use frequently occurring prepositions, adjectives, adverbs, conjunctions, and articles.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Print legibly all upper- and lowercase letters.
 - b. Use end punctuation for sentences.
 - c. Capitalize the names of months and people.
 - d. Use commas in dates and to separate individual words in a series.
 - e. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.
 - f. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.
 - g. Write numerals up to 120 (see grade 1 mathematics standards for Numbers and Operations in Base Ten); understand that numbers are also written as words; write words for numbers from one to ten.

Knowledge of Language

3. (Begins in grade 2.)

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 1 reading and content*, choosing flexibly from an array of strategies.
 - a. Use sentence-level context as a clue to the meaning of a word or phrase.
 - b. Use frequently occurring affixes as a clue to the meaning of a word.
 - c. Identify frequently occurring root words (e.g., *look*) and their inflectional forms (e.g., *looks, looked, looking*).
5. With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.
 - a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.
 - b. Define words by category and by one or more key attributes (e.g., a *duck* is a bird that swims; a *tiger* is a large cat with stripes).
 - c. Identify real-life connections between words and their use (e.g., note places at home that are cozy).
 - d. Distinguish shades of meaning among verbs differing in manner (e.g., *look, peek, glance, stare, glare, scowl*) and adjectives differing in intensity (e.g., *large, gigantic*) by defining or choosing them or by acting out the meanings.
6. Use words and phrases acquired through conversations, activities in the grade 1 curriculum, reading and being read to, and responding to texts, including using frequently occurring conjunctions (e.g., *because*) to signal simple relationships. (See grade 1 Reading Literature Standard 4 and Reading Informational Text Standard 4 on applying knowledge of vocabulary to reading; see grade 1 Writing Standard 5 and Speaking and Listening Standard 4 on strengthening writing and presentations by applying knowledge of vocabulary.)
For example, building on their knowledge of literary terms from kindergarten, students explain to their families that a fairy tale is a kind of story with special characters. When they go to the public library, they select books that are fairy tales, folktales, realistic stories, or informational books and show their families how they can tell who is the author or illustrator of a book. (RI.1.5, SL.1.4, L.1.6)
Connections to the Standards for Mathematical Practice
 6. Attend to precision.
See the [pre-K–5 resource section in this Framework](#) or the Massachusetts Curriculum Framework for Mathematics.

Kindergarten Writing Standards [W]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* The expected growth in student writing ability is reflected both in the standards themselves and in the collections of annotated student writing samples in [Appendix C of the Common Core State Standards](#) and the [Massachusetts Writing Standards in Action Project](#).

Text Types and Purposes

Note: The intent of Writing Standards 1–3 is to ensure flexibility, not rigidity, in student writing. Many effective pieces of writing blend elements of more than one text type in service of a single purpose: for example, an argument may rely on anecdotal evidence, a short story may function to explain some phenomenon, or a literary analysis may use explication to develop an argument. In addition, each of the three types of writing is itself a broad category encompassing a variety of texts: for example, narrative poems, short stories, and memoirs represent three distinct forms of narrative writing. Finally, although the bulk of writing assigned in school should address the purposes described below, other forms of writing—for example, lists and notes, descriptive letters, personal reflections—should have a place in the classroom as well. To develop flexibility and nuance in their own writing, students need to engage with a wide range of complex model texts (see Reading Literature Standard 10 and Reading Informational Text Standard 10) and study authors who have written successfully across genres (see [Appendix B: A Literary Heritage](#)).

1. Use a combination of drawing, dictating, and writing to compose opinion pieces that tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., *My favorite book is...*).
2. Use a combination of drawing, dictating, and writing to compose informative/explanatory texts that name and supply some information about a topic.
How do you play football? A student explains it all in this illustrated how-to book created during a unit on informational writing. See "How to Play Football," a kindergarten writing sample, Massachusetts Writing Standards in Action. (W.K.2, L.K.3, L.K.2)
3. Use a combination of drawing, dictating, and writing to narrate a single event or experience, or several loosely linked events or experiences; sequence the narrative appropriately and provide a reaction to what it describes.
 - a. For poems, use rhyming words to create structure. (See kindergarten Reading Foundational skills Standard 2a.)*A kindergartner tells the story, in pictures and words, of everything that happened on a night at an aunt's house. See "Auntie and Me," a kindergarten personal narrative writing sample, Massachusetts Writing Standards in Action. (W.K.2, W.K.3, W.K.5, L.K.1, L.K.2, L.K.5, L.K.6)*

Production and Distribution of Writing

4. (Begins in grade 1.)
5. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.
 - a. (Begins in grade 3.)
 - b. Demonstrate the ability to use vocabulary appropriate for kindergarten (as described in kindergarten Language Standards 4–6).
6. With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including collaboration with peers.

Research to Build and Present Knowledge

7. Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).
8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
9. (Begins in grade 4.)

Range of Writing

10. Write or dictate writing routinely for a range of tasks, purposes, and audiences.

Kindergarten Speaking and Listening Standards [SL]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Comprehension and Collaboration

1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
 - a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).
 - b. Continue a conversation through multiple exchanges.
2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Presentation of Knowledge and Ideas

4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
5. Add drawings or other visual displays to descriptions as desired to provide additional detail.
6. Speak audibly and express thoughts, feelings, and ideas clearly.
For example, pairs of students make audio recordings of poems in which each child speaks alternate lines or verses. They listen to the recordings and decide whether both voices are clear, sufficiently loud, and easy to understand.

Kindergarten Language Standards [L]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. For example, though sentence fragments may receive the most attention in grade 4, more nuanced discussions of the topic should develop throughout the later grades as students continue to analyze speakers' and authors' sentence structure, vary syntax for effect in their own speaking and writing, and more.*

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking; retain and further develop language skills learned previously.
Sentence Structure and Meaning
 - a. Demonstrate the ability to produce and expand complete sentences using frequently occurring nouns, pronouns, adjectives, verbs, question words, and name and use in context numbers 0–100 (see kindergarten mathematics standards for Counting and Cardinality).
 - b. Form questions that seek additional information, rather than a simple yes/no answer.*Word Usage*
 - a. Form regular plural nouns orally by adding /s/ or /es/.*For example, students make an illustrated list of plural nouns that end just in "s"—cats, boats, cars—and those that need "es"—classes, bushes, boxes. (W.K.10, L.K.1)*
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Print upper- and lowercase letters.
 - b. Capitalize the first word in a sentence and the pronoun I.
 - c. Recognize and name end punctuation.
 - d. Write a letter or letters for most consonant and short-vowel sounds (phonemes).
 - e. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.
 - f. Write numbers 0–20 (see kindergarten mathematics standards for Counting and Cardinality).

Knowledge of Language

3. (Begins in grade 2.)

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
 - a. Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb *to duck*).
5. With guidance and support from adults, explore word relationships and nuances in word meanings.
 - a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
 - b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).
 - c. Identify real-life connections between words and their use (e.g., note places at school that are *colorful*).
 - d. Distinguish shades of meaning among verbs describing the same general action (e.g., *walk, march, strut, prance*) by acting out the meanings.
6. Use words and phrases acquired through conversations, activities in the kindergarten curriculum, reading and being read to, and responding to texts.
For example, students use targeted academic vocabulary for mathematics—count, add, more, counting on, number, put together, number sentence, equal to, equal sign—to ask or answer questions about addition. Later, in a lesson introducing subtraction, the teacher reads the picture book Ten Little Monkeys Jumping on the Bed, by Annie Kubler, to engage students in the process of making sense of subtraction as taking away: "Eight little monkeys jumping on the bed, one fell off and then there were..." Based on story prompts, students are guided to represent subtraction situations with actions, fingers, drawings, and numbers.
Connections to the Standards for Mathematical Practice
 - a. Attend to precision
See the [pre-K–5 resource section in this Framework](#) or the Massachusetts Curriculum Framework for Mathematics.

Writing Standards K–5

The following standards for K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* The expected growth in student writing ability is reflected both in the standards themselves and in the collection of annotated student writing samples in [Appendix C](#).

Kindergartners:		Grade 1 students:	
Text Types and Purposes			
1.	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., <i>My favorite book is...</i>).	1.	Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.
2.	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	2.	Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.
3.	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.	3.	Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.
Production and Distribution of Writing			
4.	(Begins in grade 3.)	4.	(Begins in grade 3.)
5.	With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.	5.	With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.
6.	With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.	6.	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
Research to Build and Present Knowledge			
7.	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).	7.	Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).
8.	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	8.	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
9.	(Begins in grade 4.)	9.	(Begins in grade 4.)
Range of Writing			
10.	(Begins in grade 3.)	10.	(Begins in grade 3.)

Speaking and Listening Standards K–5

The following standards for K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Kindergartners:		Grade 1 students:	
Comprehension and Collaboration			
1.	Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. <ol style="list-style-type: none">a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).b. Continue a conversation through multiple exchanges.	1.	Participate in collaborative conversations with diverse partners about <i>grade 1</i> topics and texts with peers and adults in small and larger groups. <ol style="list-style-type: none">a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.c. Ask questions to clear up any confusion about the topics and texts under discussion.
2.	Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.	2.	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
3.	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	3.	Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
Presentation of Knowledge and Ideas			
4.	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	4.	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
5.	Add drawings or other visual displays to descriptions as desired to provide additional detail.	5.	Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
6.	Speak audibly and express thoughts, feelings, and ideas clearly.	6.	Produce complete sentences when appropriate to task and situation. (See grade 1 Language standards 1 and 3 on page 26 for specific expectations.)

Language Standards K–5

The following standards for grades K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and grades as they are applied to increasingly sophisticated writing and speaking are marked with an asterisk (*). See the table on page 30 for a complete list and Appendix A for an example of how these skills develop in sophistication.*

Kindergartners:		Grade 1 students:	
Conventions of Standard English			
1.	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none">a. Print many upper- and lowercase letters.b. Use frequently occurring nouns and verbs.c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., <i>dog, dogs; wish, wishes</i>).d. Understand and use question words (interrogatives) (e.g., <i>who, what, where, when, why, how</i>).e. Use the most frequently occurring prepositions (e.g., <i>to, from, in, out, on, off, for, of, by, with</i>).f. Produce and expand complete sentences in shared language activities.	1.	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none">a. Print all upper- and lowercase letters.b. Use common, proper, and possessive nouns.c. Use singular and plural nouns with matching verbs in basic sentences (e.g., <i>He hops. We hop</i>).d. Use personal, possessive, and indefinite pronouns (e.g., <i>I, me, my; they, them, their; anyone, everything</i>).e. Use verbs to convey a sense of past, present, and future (e.g., <i>Yesterday I walked home; Today I walk home; Tomorrow I will walk home</i>).f. Use frequently occurring adjectives.g. Use frequently occurring conjunctions (e.g., <i>and, but, or, so, because</i>).h. Use determiners (e.g., articles, demonstratives).i. Use frequently occurring prepositions (e.g., <i>during, beyond, toward</i>).j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.
2.	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none">a. Capitalize the first word in a sentence and the pronoun <i>I</i>.b. Recognize and name end punctuation.c. Write a letter or letters for most consonant and short-vowel sounds (phonemes).d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.	2.	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none">a. Capitalize dates and names of people.b. Use end punctuation for sentences.c. Use commas in dates and to separate single words in a series.d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.
Knowledge of Language			
3.	(Begins in grade 2.)	3.	(Begins in grade 2.)
Vocabulary Acquisition and Use			
4.	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>kindergarten reading and content</i> . <ol style="list-style-type: none">a. Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb <i>to duck</i>).b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed, -s, re-, un-, pre-, -ful, -less</i>) as a clue to the meaning of an unknown word.	4.	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 1 reading and content</i> , choosing flexibly from an array of strategies. <ol style="list-style-type: none">a. Use sentence-level context as a clue to the meaning of a word or phrase.b. Use frequently occurring affixes as a clue to the meaning of a word.c. Identify frequently occurring root words (e.g., <i>look</i>) and their inflectional forms (e.g., <i>looks, looked, looking</i>).
5.	With guidance and support from adults, explore word relationships and nuances in word meanings. <ol style="list-style-type: none">a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).c. Identify real-life connections between words and their use (e.g., note places at school that are <i>colorful</i>).d. Distinguish shades of meaning among verbs describing the same general action (e.g., <i>walk, march, strut, prance</i>) by acting out the meanings.	5.	With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. <ol style="list-style-type: none">a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.b. Define words by category and by one or more key attributes (e.g., a <i>duck</i> is a bird that swims; a <i>tiger</i> is a large cat with stripes).c. Identify real-life connections between words and their use (e.g., note places at home that are cozy).d. Distinguish shades of meaning among verbs differing in manner (e.g., <i>look, peek, glance, stare, glare, scow</i>) and adjectives differing in intensity (e.g., <i>large, gigantic</i>) by defining or choosing them or by acting out the meanings.
6.	Use words and phrases acquired through conversations, reading and being read to, and responding to texts.	6.	Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., <i>because</i>).

Grade 1 Writing Standards [W]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* The expected growth in student writing ability is reflected both in the standards themselves and in the collections of annotated student writing samples in [Appendix C of the Common Core State Standards](#) and the [Massachusetts Writing Standards in Action Project](#).

Text Types and Purposes

Note: The intent of Writing Standards 1–3 is to ensure flexibility, not rigidity, in student writing. Many effective pieces of writing blend elements of more than one text type in service of a single purpose: for example, an argument may rely on anecdotal evidence, a short story may function to explain some phenomenon, or a literary analysis may use explication to develop an argument. In addition, each of the three types of writing is itself a broad category encompassing a variety of texts: for example, narrative poems, short stories, and memoirs represent three distinct forms of narrative writing. Finally, although the bulk of writing assigned in school should address the purposes described below, other forms of writing—for example, lists and notes, descriptive letters, personal reflections—should have a place in the classroom as well. To develop flexibility and nuance in their writing, students need to engage with a wide range of complex model texts (see Reading Literature Standard 10 and Reading Informational Text Standard 10) and study authors who have written successfully across genres (see [Appendix B: A Literary Heritage](#)).

1. Write opinion pieces that introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.
"Legos are great toys," writes a first grader. "Keep reading and find out why." With detailed drawings and expressive language to support an opinion, a student makes the case for what one can build with these blocks and a little imagination. See "Legos," an opinion/argument essay (W.1.1, W.1.5, L.1.1, L.1.2, L.1.6). Another student writes a restaurant review, stating an opinion about a favorite place to eat out, including recommended dishes. See "Pizzeria Bread," a sample first grade opinion/argument essay (W.1.1, W.1.5, W.1.8, L.1.1, L.1.2, L.1.5) Massachusetts Writing Standards in Action.
2. Write informative/explanatory texts that name a topic, supply some facts about the topic, and provide some sense of closure.
A student introduces a distinct topic, explains facts about it, provides an emphatic closure, and maintains a formal tone in "Weather in the Polar Region," an informational essay, Massachusetts Writing Standards in Action. (W.1.2, W.1.5, W.1.8, L.1.1, L.1.2)
3. Write narratives in prose or poem form that recount two or more appropriately sequenced events or experiences, include some details about what happened or was experienced, use temporal words to signal order where appropriate, and provide some sense of closure.
 - a. For poems, use rhyming words and words that repeat long or short vowel sounds to create structure (see grade 1 Reading Foundational Skills Standard 2a).

Production and Distribution of Writing

4. Produce writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Standards 1–3 above.)
5. With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.
 - a. (Begins in grade 3.)
 - b. Demonstrate the ability to choose and use appropriate vocabulary (as described in Language Standards 4–6 up to and including grade 1).
6. With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

Research to Build and Present Knowledge

7. Participate in shared research and writing projects (e.g., explore a number of how-to books on a given topic and use them to write a sequence of instructions).
8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
For example, in science, students explore sources of light and how light is important. They investigate how shadows are made and look at reflections using mirrors to redirect a light beam. They write and perform skits to explain what they have learned about the interaction of light and materials. (W.1.2, W.1.8, Science Standards)
9. (Begins in grade 4.)

Range of Writing

10. Write routinely for a range of tasks, purposes, and audiences.

Grade 1 Speaking and Listening Standards [SL]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Comprehension and Collaboration

1. Participate in collaborative conversations with diverse partners about *grade 1* topics and texts with peers and adults in small and larger groups.
 - a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
 - b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
 - c. Ask questions to clear up any confusion about the topics and texts under discussion.
2. Confirm understanding of a text read aloud or information presented orally or through other media.
For example, students explore the theme, "A true friend helps us when we are in trouble" in poems, pictures, and stories and discuss the examples in small groups, where they practice listening and building on one another's ideas. (SL.1.2, SL.1.3)
3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
Connections to the Standards for Mathematical Practice
 2. Reason abstractly and quantitatively.
 3. Construct viable arguments and respond to the reasoning of others.See the [pre-K–5 resource section in this Framework](#) or the Massachusetts Curriculum Framework for Mathematics.
2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

Presentation of Knowledge and Ideas

4. Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly and using appropriate vocabulary. (See grade 1 Language Standards 4–6 for specific expectations regarding vocabulary.)
5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
6. Produce complete sentences when appropriate to task and situation. (See grade 1 Language Standard 1 for specific expectations.)

Grade 1 Language Standards [L]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. For example, though sentence fragments may receive the most attention in grade 4, more nuanced discussions of the topic should develop throughout the later grades as students continue to analyze speakers' and authors' sentence structure, vary syntax for effect in their own speaking and writing, and more.*

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking; retain and further develop language skills learned in previous grades.
Sentence Structure and Meaning
 - a. Produce and expand simple and compound sentences.
 - b. Demonstrate understanding that a question is a type of sentence.
 - c. Use singular and plural nouns with matching verbs in sentences.
 - d. Use verbs in sentences to convey a sense of past, present, and future.*Word Usage*
 - a. Use common, proper, and possessive nouns.
 - b. Use personal, possessive, and indefinite pronouns.
 - c. Use frequently occurring prepositions, adjectives, adverbs, conjunctions, and articles.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Print legibly all upper- and lowercase letters.
 - b. Use end punctuation for sentences.
 - c. Capitalize the names of months and people.
 - d. Use commas in dates and to separate individual words in a series.
 - e. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.
 - f. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.
3. Write numbers up to 120 (see grade 1 mathematics standards for Numbers and Operations in base Ten); understand that numbers are also written as words, write words for numbers from one to ten.

Knowledge of Language

3. (Begins in grade 2.)

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 1 reading and content*, choosing flexibly from an array of strategies.
 - a. Use sentence-level context as a clue to the meaning of a word or phrase.
 - b. Use frequently occurring affixes as a clue to the meaning of a word.
 - c. Identify frequently occurring root words (e.g., *look*) and their inflectional forms (e.g., *looks, looked, looking*).
5. With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.
 - a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.
 - b. Define words by category and by one or more key attributes (e.g., a *duck* is a bird that swims; a *tiger* is a large cat with stripes).
 - c. Identify real-life connections between words and their use (e.g., note places at home that are cozy).
 - d. Distinguish shades of meaning among verbs differing in manner (e.g., *look, peek, glance, stare, glare, scowl*) and adjectives differing in intensity (e.g., *large, gigantic*) by defining or choosing them or by acting out the meanings.
6. Use words and phrases acquired through conversations, activities in the grade 1 curriculum, reading and being read to, and responding to texts, including using frequently occurring conjunctions (e.g., *because*) to signal simple relationships. (See grade 1 Reading Literature Standard 4 and Reading Informational Text Standard 4 on applying knowledge of vocabulary to reading; see grade 1 Writing Standard 5 and Speaking and Listening Standard 4 on strengthening writing and presentations by applying knowledge of vocabulary.)
For example, building on their knowledge of literary terms from kindergarten, students explain to their families that a fairy tale is a kind of story with special characters. When they go to the public library, they select books that are fairy tales, folktales, realistic stories, or informational books and show their families how they can tell who is the author or illustrator of a book. (RI.1.5, SL.1.4, L.1.6)
Connections to the Standards for Mathematical Practice
 6. Attend to precision.
See the [pre-K–5 resource section in this Framework](#) or the Massachusetts Curriculum Framework for Mathematics.

Grade 2 Writing Standards [W]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. Students advancing through the year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. The expected growth in student writing ability is reflected both in the standards themselves and in the collections of annotated student writing samples in Appendix C of the Common Core State Standards and the Massachusetts Writing Standards in Action Project.

Text Types and Purposes

Note: The intent of Writing Standards 1–3 is to ensure flexibility, not rigidity, in student writing. Many effective pieces of writing blend elements of more than one text type in service of a single purpose: for example, an argument may rely on anecdotal evidence, a short story may function to explain some phenomenon, or a literary analysis may use explication to develop an argument. In addition, each of the three types of writing is itself a broad category encompassing a variety of texts: for example, narrative poems, short stories, and memoirs represent three distinct forms of narrative writing. Finally, although the bulk of writing assigned in school should address the purposes described below, other forms of writing—for example, lists and notes, descriptive letters, personal reflections—should have a place in the classroom as well. To develop flexibility and nuance in their own writing, students need to engage with a wide range of complex model texts (see Reading Literature Standard 10 and Reading Informational Text Standard 10) and study authors who have written successfully across genres (see Appendix B: A Literary Heritage).

- Write opinion pieces that introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. In math, instead of writing opinions, students write or draw solutions to math word problems and present arguments to explain their thinking. **Connections to the Standards for Mathematical Practice**
2. Reason abstractly and quantitatively.
3. Construct viable arguments and respond to the reasoning of others. See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics. For example, students keep a math journal in which they record proposed solutions to word problems in addition and subtraction. They use drawings, written equations, and written sentences to argue why 8 is the correct answer to a problem such as “If there are 15 cupcakes in the table and 7 are eaten, how many remain?”
- Write informative/explanatory texts that introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section. **Second graders research grey wolves and write and illustrate informational reports. See two different reports from this project, “All about Grey Wolves: the Pack Family,” and “All about Grey Wolves: Howl in the Night.” Massachusetts Writing Standards in Action (W.2.2, W.2.3, W.2.6, L.2.1, L.2.2, L.2.3)** Write narratives in prose or poem form that recount a well-elaborated event or experience, or a set of events or experiences; include details and dialogue to show actions, thoughts, and feelings; use temporal words to signal order where appropriate; and provide a sense of closure.
 - For poems, use words and phrases that form patterns of sound (e.g., regular beats, alliteration, end rhymes, repeated sounds in words or lines) to create structure. (See grade 2 Reading Literature Standard 4.)

In “Goodbye to Winter Clothes,” a second grader captures the turning point from New England’s winter to spring.
*“Good bye to winter clothes
Peace out winter
Adios to slipping on ice
Hey beautiful flowers
Hola to bright birds
Hey to shiny grass”*
This narrative in the form of a poem is from *Massachusetts Writing Standards in Action*. (W.2.3, W.2.10, L.2.1, L.2.2, L.2.5)

Production and Distribution of Writing

- Produce writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) For example, students learn about the job of a reporter and news reporting in print and online journalism. They learn to read, analyze, and evaluate models of narrative news reporting and write their own news stories using what they have learned from the models. (W.2.3, W.2.4)
- With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
 - (Begins in grade 3.)
 - Demonstrate the ability to choose and use appropriate vocabulary (as described in Language Standards 4–6 up to and including grade 3).
- With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

Research to Build and Present Knowledge

- Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). For example, students read biographies of people who have made a difference in the world. They conduct research and write new or updated biographies of subjects of their choosing. (RI.2.2, RI.2.3, W.2.2, W.2.7)
- Recall information from experiences or gather information from provided sources to answer a question. (Begins in grade 4.)

Range of Writing

- Write routinely for a range of tasks, purposes, and audiences.

Writing Standards K–5

The following standards for K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. Students advancing through the grades are expected to meet each year’s grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. The expected growth in student writing ability is reflected both in the standards themselves and in the collection of annotated student writing samples in Appendix C.

Grade 2 students:	Grade 3 students:
Text Types and Purposes <ol style="list-style-type: none">Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure. Production and Distribution of Writing <ol style="list-style-type: none">(Begins in grade 3)With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers. Research to Build and Present Knowledge <ol style="list-style-type: none">Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).Recall information from experiences or gather information from provided sources to answer a question. Range of Writing <ol style="list-style-type: none">(Begins in grade 4)(Begins in grade 3)	Text Types and Purposes <ol style="list-style-type: none">Write opinion pieces on topics or texts, supporting a point of view with reasons.<ol style="list-style-type: none">Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.Provide reasons that support the opinion.Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons.Provide a concluding statement or section.Write informative/explanatory texts to examine a topic and convey ideas and information clearly.<ol style="list-style-type: none">Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.Develop the topic with facts, definitions, and details.Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.Provide a concluding statement or section.Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.<ol style="list-style-type: none">Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally.Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.Use temporal words and phrases to signal event order.Provide a sense of closure. Production and Distribution of Writing <ol style="list-style-type: none">With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.)With guidance and support from peers and adults, develop and strengthen writing as needed by revising, editing, and proofreading. (Editing for conventions should demonstrate command of Language Standards 1–3 up to and including grade 3 on page 29.)With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others. Research to Build and Present Knowledge <ol style="list-style-type: none">Conduct short research projects that build knowledge about a topic.Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories. Range of Writing <ol style="list-style-type: none">(Begins in grade 4)Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Grade 2 Speaking and Listening Standards [SL]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year’s grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Comprehension and Collaboration

- Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.
 - Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
 - Build on others’ talk in conversations by linking their comments to the remarks of others.
 - Ask for clarification and further explanation as needed about the topics and texts under discussion.

For example, students working in a group studying community helpers make a list of people they know and could interview. Building on one another’s knowledge, they decide whom they wish to invite to class to discuss the work they do.
Connections to the Standards for Mathematical Practice
2. Reason abstractly and quantitatively.
3. Construct viable arguments and respond to the reasoning of others. See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.
2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue. For example, groups of students ask and answer questions about mathematical reasoning as they solve word problems in which they must add and subtract within 1,000. In their conversations, they use general academic and domain-specific vocabulary such as place value, digit, value, operation, odd, subtract, addition, subtraction, sum, difference, compose, decompose, increase, decrease, composition, and decomposition. They complete an assessment in which, as head zookeepers, they are responsible for ordering animals’ food. They address Standards for Mathematical Practice 3 through 8 as well as math content standards as they solve problems like the one below:
*Penguins: The 80 penguins eat a total of 504 pounds of fish each week.
Week 1: Currently there are 282 pounds of fish in the freezer. How many pounds of new fish should you order to feed the penguins for week one?
Week 1 Order: _____ pounds of fish
Week 2: After week one, there are 216 pounds of fish left in the freezer. The 80 penguins eat a total of 504 pounds of fish each week. How many pounds of new fish should you order to feed the penguins for week two?
Week 2 Order: _____ pounds of fish*

Presentation of Knowledge and Ideas

- Tell a story, recount an experience, or explain how to solve a mathematical problem with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences and using appropriate vocabulary. (See grade 2 Language Standards 4–6 for specific expectations regarding vocabulary.) **Connections to the Standards for Mathematical Practice**
2. Reason abstractly and quantitatively.
3. Construct viable arguments and respond to the reasoning of others.
6. Attend to precision. See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.
5. Create audio recordings of stories or poems; add drawings or other visual displays to stories or descriptions of experiences when appropriate to clarify ideas, thoughts, and feelings.
6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 2 Language Standards 1 and 3 for specific expectations.)

Grade 2 Language Standards [L]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year’s grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. For example, though sentence fragments may receive the most attention in grade 4, more nuanced discussions of the topic should develop throughout the later grades as students continue to analyze speakers’ and authors’ sentence structure, vary syntax for effect in their own speaking and writing, and more.

Conventions of Standard English

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking; retain and further develop language skills learned in previous grades. **Sentence Structure and Meaning**
 - Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences and choose among sentence types depending on the meaning to be conveyed.
 - Use adjectives and adverbs in sentences and choose between them depending on what is to be modified.
 - Use collective nouns and frequently occurring irregular plural nouns.
 - Form and use the past tense of frequently occurring irregular verbs.
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Print upper- and lowercase letters legibly and fluently.
 - Capitalize holidays, product names, and geographic names.
 - Use commas in greetings and closings of letters.
 - Use an apostrophe to form contractions and frequently occurring possessives.
 - Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil).
 - Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
- Demonstrate understanding that context determines whether the writer uses a numeral or a written number (e.g., numerals in 1 + 2 = 4, but written words in “When I was one, I was just begun,” “When I was two, I was still quite new” from A. A. Milne’s poem “Now We Are Six”).

Knowledge of Language

- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - Compare formal and informal uses of English.

Vocabulary Acquisition and Use

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.
 - Use sentence-level context as a clue to the meaning of a word or phrase.
 - Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/re tell).
 - Use a known root word as a clue to the meaning of a word (e.g., addition, additional).
 - Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookstore, notebook, bookmark).
 - Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
 - Recognize and use appropriately abbreviations related to grade-level content or commonly used in everyday life (e.g., a.m., p.m.).
 - Recognize and use appropriately symbols related to grade-level content or commonly used in everyday life (e.g., S, C).
- Demonstrate understanding of word relationships and nuances in word meanings.
 - Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy).
 - Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., thin, slender, skinny, scrawny).
- Use general academic and domain-specific words and phrases, as well as words and phrases acquired through conversations, activities in the grade 2 curriculum, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy that makes me happy).

Connections to the Standards for Mathematical Practice
6. Attend to precision. See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.

Speaking and Listening Standards K–5

The following standards for K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year’s grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Grade 2 students:	Grade 3 students:
Comprehension and Collaboration <ol style="list-style-type: none">Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.<ol style="list-style-type: none">Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).Build on others’ talk in conversations by linking their comments to the remarks of others.Ask for clarification and further explanation as needed about the topics and texts under discussion.Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue. Presentation of Knowledge and Ideas <ol style="list-style-type: none">Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 2 Language Standards 1 and 3 on page 26 for specific expectations.)	Comprehension and Collaboration <ol style="list-style-type: none">Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly.<ol style="list-style-type: none">Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.Explain their own ideas and understanding in light of the discussion.Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.Ask and answer questions about information from a speaker, offering appropriate elaboration and detail. Presentation of Knowledge and Ideas <ol style="list-style-type: none">Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language Standards 1 and 3 on page 28 for specific expectations.)

Language Standards K–5

The following standards for grades K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year’s grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. The standards are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking. Appendix A for an example of how these skills develop in sophistication.

Grade 2 students:	Grade 3 students:
Conventions of Standard English <ol style="list-style-type: none">Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.<ol style="list-style-type: none">Use collective nouns (e.g., group).Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish).Use reflexive pronouns (e.g., myself, ourselves).Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, took).Use adjectives and adverbs and choose between them depending on what is to be modified.Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie. The little boy watched the movie. The action movie was watched by the little boy).Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.<ol style="list-style-type: none">Capitalize holidays, product names, and geographic names.Use commas in greetings and closings of letters.Use an apostrophe to form contractions and frequently occurring possessives.Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil).Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	Conventions of Standard English <ol style="list-style-type: none">Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.<ol style="list-style-type: none">Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.Form and use regular and irregular plural nouns.Use abstract nouns (e.g., childhood).Form and use regular and irregular verbs.Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses.Ensure subject-verb and pronoun-antecedent agreement.¹Form and use comparative and superlative adjectives and adverbs and choose between them depending on what is to be modified.Use coordinating and subordinating conjunctions.Produce simple, compound, and complex sentences.Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.<ol style="list-style-type: none">Capitalize appropriate words in titles.Use commas in addresses.Form commas and quotation marks in dialogue.Form and use possessives.Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns) to determine or clarify the meaning of words and phrases.Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

Knowledge of Language

- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - Compare formal and informal uses of English.

Vocabulary Acquisition and Use

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.
 - Use sentence-level context as a clue to the meaning of a word or phrase.
 - Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/re tell).
 - Use a known root word as a clue to the meaning of a word (e.g., addition, additional).
 - Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookstore, notebook, bookmark).
 - Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
- Demonstrate understanding of word relationships and nuances in word meanings.
 - Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy).
 - Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., thin, slender, skinny, scrawny).
- Use general academic and domain-specific words and phrases, as well as words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy that makes me happy).

Grade 3 Writing Standards [W]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. Students advancing through the grades are expected to meet each year’s grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. The expected growth in student writing ability is reflected both in the standards themselves and in the collections of annotated student writing samples in Appendix C of the Common Core State Standards and the Massachusetts Writing Standards in Action Project.

Text Types and Purposes

Note: The intent of Writing Standards 1–3 is to ensure flexibility, not rigidity, in student writing. Many effective pieces of writing blend elements of more than one text type in service of a single purpose: for example, an argument may rely on anecdotal evidence, a short story may function to explain some phenomenon, or a literary analysis may use explication to develop an argument. In addition, each of the three types of writing is itself a broad category encompassing a variety of texts: for example, narrative poems, short stories, and memoirs represent three distinct forms of narrative writing. Finally, although the bulk of writing assigned in school should address the purposes described below, other forms of writing—for example, lists and notes, descriptive letters, personal reflections—should have a place in the classroom as well. To develop flexibility and nuance in their own writing, students need to engage with a wide range of complex model texts (see Reading Literature Standard 10 and Reading Informational Text Standard 10) and study authors who have written successfully across genres (see Appendix B: A Literary Heritage).

- Write opinion pieces on topics or texts, supporting an opinion with reasons.
 - Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.
 - Provide reasons that support the opinion.
 - Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons.
 - Provide a concluding statement or section.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
 - Introduce a topic and group-related information together; include illustrations when useful to aiding comprehension.
 - Develop the topic with facts, definitions, and details.
 - Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.
 - Provide a concluding statement or section.
- Write narratives to develop real or imagined experiences or events using effective literary techniques, descriptive details, and clear sequences.
 - Establish a situation and introduce a speaker, narrator, and/or characters; organize an appropriate narrative sequence.
 - Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences or events or show responses to situations.

For example, as they study the colonial period in Massachusetts, students read and view print and digital resources on the colonists’ conflicting views about separating from Britain. Sources include *Liberty or the Revolution? The War Began by Lucille Recht Penner*, the PBS website *History of US* based on Jay Kistler’s book series, and *Colonial Voices: Hear Them Speak*, a collection of primary sources by Kay Winter. Students write a character from the period and write a letter from the character’s point of view, giving an opinion and supporting either the revolutionary or the loyalist cause with reasons. (RI.3.6, RI.3.5, W.3.1)
Connections to the Standards for Mathematical Practice
2. Reason abstractly and quantitatively.
3. Construct viable arguments and respond to the reasoning of others. See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.
2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

- Introduce a topic and group-related information together; include illustrations when useful to aiding comprehension.
- Develop the topic with facts, definitions, and details.
- Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.
- Provide a concluding statement or section.

In “Visions of Helen Keller,” a solid example of biographical writing, a third grader presents details that reveal the significance of Keller’s accomplishments as well as admiration and empathy for her life. See this example of informational writing at *Massachusetts Writing Standards in Action*. (W.3.2, W.3.4, W.3.7, W.3.8, RI.3.2, RI.3.3, L.3.2, L.3.3)

Production and Distribution of Writing

- Produce writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- Develop and strengthen writing as needed by planning, revising, editing, and proofreading. (Editing for conventions should demonstrate command of Language Standards 1–3 up to and including grade 3.)
- Demonstrate the ability to choose and use appropriate vocabulary (as described in Language Standards 4–6 up to and including grade 3).
- Use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.

Research to Build and Present Knowledge

- Conduct short research projects that build knowledge about a topic.
- Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

Range of Writing

- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Grade 3 Speaking and Listening Standards [SL]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year’s grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Comprehension and Collaboration

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly. preparation and other information known about the topic to explore ideas under discussion. (See grade 3 Reading Literature Standard 1 and Reading Informational Text Standard 1 for specific expectations.)
 - Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
 - Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
 - Explain their own ideas and understanding in light of the discussion.

Presentation of Knowledge and Ideas

- Report on a topic, text, or solution to a mathematical problem, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace and using appropriate vocabulary. (See grade 3 Language Standards 4–6 for specific expectations regarding vocabulary.) For example, in a science and literacy unit, students study weather and weather-related hazards. The unit focuses on developing general academic and science-specific vocabulary using books such as *The Inside Weather* by Mary Kay Carson, *Weather Words* and *What They Mean* by Gail Gibbons, and *Research* and *analyze weather data from their own observations. They write up their findings and present them in oral reports.* (W.3.2, SL.3.4, L.3.6)
Connections to the Standards for Mathematical Practice
2. Reason abstractly and quantitatively.
3. Construct viable arguments and respond to the reasoning of others.
6. Attend to precision. See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.
5. Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.
6. Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language Standards 1 and 3 for specific expectations.)

Grade 3 Language Standards [L]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year’s grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. For example, though sentence fragments may receive the most attention in grade 4, more nuanced discussions of the topic should develop throughout the later grades as students continue to analyze speakers’ and authors’ sentence structure, vary syntax for effect in their own speaking and writing, and more.

Conventions of Standard English

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking; retain and further develop language skills learned in previous grades. (See grade 3 Writing Standards 1 and 2 on page 24 for specific expectations regarding conventions.) **Sentence Structure and Meaning**
 - Produce, expand, and rearrange complete simple, compound, and complex sentences.
 - Ensure subject-verb and pronoun-antecedent agreement.¹
 - Use verbs in the present, past, and future tenses and choose among them depending on the overall meaning of the sentence.
 - Use coordinating and subordinating conjunctions and choose between them depending on the overall meaning of the sentence.
 - Form and use comparative and superlative adjectives and adverbs and choose between them depending on what is to be modified and the overall meaning of the sentence.
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Write legibly and fluently by hand, using either printing or cursive handwriting.

¹ These skills are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking. See the table in the pre-K–5 resource section in this Framework.

- Capitalize appropriate words in titles.
- Use commas in addresses.
- Use commas and quotation marks in dialogue.
- Form and use possessives.
- Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).
- Demonstrate understanding that numerals used at the beginning of a sentence are written as words and capitalized (e.g., “Three pandas could be seen eating leaves high in the bamboo grove”).
- Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns) to determine or clarify the meaning of words and phrases.
- Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

Connections to the Standards for Mathematical Practice
6. Attend to precision. See the pre-K–5 resource section in this Framework or the Massachusetts Curriculum Framework for Mathematics.

Grade 4 Writing Standards [W]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* The expected growth in student writing ability is reflected both in the standards themselves and in the collections of annotated student writing samples in [Appendix C of the Common Core State Standards](#) and the [Massachusetts Writing Standards in Action Project](#).

Text Types and Purposes

Note: The intent of Writing Standards 1–3 is to ensure flexibility, not rigidity, in student writing. Many effective pieces of writing blend elements of more than one text type in service of a single purpose: for example, an argument may rely on anecdotal evidence, a short story may function to explain some phenomenon, or a literary analysis may use explanation to develop an argument. In addition, each of the three types of writing is itself a broad category encompassing a variety of texts: for example, narrative poems, short stories, and memoirs represent three distinct forms of narrative writing. Finally, although the bulk of writing assigned in school should address the purposes described below, other forms of writing—for example, lists and notes, descriptive letters, personal reflections—should have a place in the classroom as well. To develop flexibility and nance in their own writing, students need to engage with a wide range of complex model texts (see Reading Literature Standard 10 and Reading Informational Text Standard 10) and study authors who have written successfully across genres (see [Appendix B: A Literary Heritage](#)).

- Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
 - Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped in paragraphs and sections to support the writer's purpose.
 - Provide logically ordered reasons that are supported by facts and details.
 - Link opinion and reasons using words and phrases (e.g., *for instance*, *in order to*, *in addition*).
 - Provide a concluding statement or section related to the opinion presented.

In outdoor recess a necessity for elementary school students? A writer provides a clear opinion with reasons as well as acknowledgment of counterarguments. Massachusetts Writing Standards in Action. (W.4.1, W.4.4, L.4.1, L.4.2, L.4.3)

In math, instead of writing opinions, students write or draw solutions to math word problems and present arguments to explain their thinking. Connections to the Standards for Mathematical Practice

- Reason abstractly and quantitatively.
- Construct viable arguments and respond to the reasoning of others.

See the [pre-K–5 resource section in this Framework](#) or the [Massachusetts Curriculum Framework for Mathematics](#).

- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
 - Introduce a topic clearly and group related information in paragraphs and sections; include text features (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
 - Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
 - Link ideas within categories of information using words and phrases (e.g., *another*, *for example*, *also*, *because*).
 - Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - Provide a concluding statement or section related to the information or explanation presented.

A student writes a first-person newspaper article reflecting on the challenges of living with Asperger's syndrome. See "Living with Asperger's." Massachusetts Writing Standards in Action. (W.4.2, W.4.3, W.4.5, L.4.2, L.4.3)

- Write narratives in prose or poem form to develop experiences or events using effective literary techniques, descriptive details, and clear sequences.
 - Orient the reader by establishing a situation and introducing a speaker, narrator, and/or characters; organize an appropriate narrative sequence.
 - Use dialogue and description to develop experiences or events or show responses to situations.
 - Use concrete words and phrases, figurative language such as similes and metaphors, and sensory details to convey experiences or events precisely.
 - Provide a sense of closure appropriate to the narrated experiences or events.
 - For poems, use patterns of sound (e.g., rhyme, rhythm, alliteration, consonance) and visual patterns (e.g., line length, grouped lines as stanzas or verses) to create works that are distinctly different in form from prose narratives. (See grade 4 Reading Literature Standard 5.)*

A writer creates a vivid picture of a bowling match. In "The Comeback," a personal narrative that includes just enough information on the sport for a reader unfamiliar with the terms. Massachusetts Writing Standards in Action. (W.4.3, W.4.2, W.4.4, W.4.5, L.4.1, L.4.2, L.4.3)

Production and Distribution of Writing

- Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- Develop and strengthen writing as needed by planning, revising, and editing.
 - Demonstrate command of standard English conventions (as described in Language Standards 1–3 up to and including grade 4).
 - Demonstrate the ability to use general academic and domain-specific vocabulary appropriately (as described in Language Standards 4–6 up to and including grade 4).

Connections to the Standards for Mathematical Practice

- Attend to precision.

See the [pre-K–5 resource section in this Framework](#) or the [Massachusetts Curriculum Framework for Mathematics](#).

- Use technology, including current web-based communication platforms, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.

Research to Build and Present Knowledge

- Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
- Draw evidence from literary or informational texts to support written analysis, reflection, and research, applying one or more grade 4 standards for Reading Literature or Reading Informational Text as needed.

Range of Writing

- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Grade 4 Speaking and Listening Standards [SL]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

Comprehension and Collaboration

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on [grade 4 topics and texts](#), building on others' ideas and expressing their own clearly.
 - Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. (See grade 4 Reading Literature Standard 1 and Reading Informational Text Standard 1 for specific expectations regarding the use of textual evidence.)
 - Follow agreed-upon rules for discussions and carry out assigned roles.
 - Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
 - Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

For example, in literature discussion groups, individual students take on the roles of leader, scribe, and reporter as they discuss questions about themes they have generated in preparation for a report to the class. (R.4.2, S.L.4.1)

Connections to the Standards for Mathematical Practice

- Reason abstractly and quantitatively.

- Construct viable arguments and respond to the reasoning of others.

See the [pre-K–5 resource section in this Framework](#) or the [Massachusetts Curriculum Framework for Mathematics](#).

- Paraphrase portions of a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- Reason abstractly and quantitatively.
- Construct viable arguments and respond to the reasoning of others.
- Attend to precision.

See the [pre-K–5 resource section in this Framework](#) or the [Massachusetts Curriculum Framework for Mathematics](#).

- Identify the reasons and evidence a speaker provides to support particular points.

Presentation of Knowledge and Ideas

- Report on a topic, text, procedure, or solution to a mathematical problem, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace and use appropriate vocabulary. (See grade 4 Language Standards 4–6 for specific expectations regarding vocabulary.)
- Connections to the Standards for Mathematical Practice*
- Reason abstractly and quantitatively.
- Construct viable arguments and respond to the reasoning of others.
- Attend to precision.

See the [pre-K–5 resource section in this Framework](#) or the [Massachusetts Curriculum Framework for Mathematics](#).

- Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- Differentiate between contexts that call for formal English (e.g., presenting research findings) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. (See grade 4 Language Standards 1 and 3 for specific expectations.)

Grade 4 Language Standards [L]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. For example, though students may receive the most attention in grade 4, more nuanced discussions of the topic should develop throughout the later grades as students continue to analyze speakers' and authors' sentence structure, very syntax for effect in their own speaking and writing, and more.*

Conventions of Standard English

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking; retain and further develop language skills learned in previous grades. (See grade 4 Writing Standard 5 and Speaking and Listening Standard 6 on strengthening writing and presentations by applying knowledge of conventions.)
- Sentence Structure and Meaning*
 - Produce complete sentences, using knowledge of subject and predicate to recognize and correct inappropriate sentence fragments and run-on sentences.¹
 - Correctly use frequently confused words (e.g., *their/there*).
 - Use helping verbs, also known as auxiliaries (e.g., *can*, *may*, *might*, *should*), to convey various conditions of possibility, likelihood, obligation, or permission, choosing among helping verbs depending on the overall meaning of the sentence.
 - Use relative pronouns and relative adverbs to add more information about a noun or verb used in a sentence.
 - Form and use prepositional phrases in sentences to add more information about qualities such as location, time, agency, and direction.
 - Form and use progressive verb tenses.
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

¹ These skills are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking. See the table in the pre-K–5 resource section in this Framework.

- Write legibly and fluently by hand, using either printing or cursive handwriting; write their given name signature in cursive.
- Use correct capitalization.
- Use commas and quotation marks to mark direct speech and quotations from a text.
- Use a comma before a coordinating conjunction in a compound sentence.
- Spell grade-appropriate words correctly, consulting references as needed.

Knowledge of Language

- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - Choose words and phrases to convey ideas precisely.¹⁰
 - Choose punctuation for effect.
 - Differentiate between contexts that call for formal English (e.g., presenting research findings) and situations where informal discourse is appropriate (e.g., small-group discussion).

Vocabulary Acquisition and Use

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on [grade 4 reading and content](#), choosing flexibly from a range of strategies.
 - Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.
 - Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *telegraph*, *photograph*, *autograph*).
 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
 - Recognize and use appropriately abbreviations related to grade-level content or common in everyday life (e.g., *hr.*, *min.*, *sec.*).
 - Recognize and use appropriately symbols related to grade-level content or common in everyday life (e.g., *%, #, #*).
- Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - Explain the meaning of simple similes and metaphors (e.g., *as pretty as a picture*) in context.
 - Recognize and explain the meaning of common idioms, adages, and proverbs.
 - Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).

For example, students collect common idioms, proverbs, and figurative phrases in English from their reading and from interviews with their family members. They research the terms and create an illustrated dictionary that explains the meaning of sentences such as: It's raining cats and dogs. This only happens once in a blue moon. My dad is a couch potato. My sister was cool as a cucumber when she gave her report. Not all that glitters is gold. Neither a borrower nor a lender be. (W.4.7, L.4.5)

- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., *quizzed*, *whined*, *stammered*) and that are basic to a particular topic (e.g., *wildlife*, *conservation*, and *endangered* when discussing animal preservation). (See grade 4 Reading Literature Standard 4 and Reading Informational Text Standard 4 on applying knowledge of vocabulary to reading; see grade 4 Writing Standard 5 and Speaking and Listening Standard 4 on strengthening writing and presentations by applying knowledge of vocabulary.)

¹⁰ These skills are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking. See the table in the pre-K–5 resource section in this Framework.

Connections to the Standards for Mathematical Practice

- Attend to precision.

See the [pre-K–5 resource section in this Framework](#) or the [Massachusetts Curriculum Framework for Mathematics](#).

COMMON CORE STATE STANDARDS for ENGLISH LANGUAGE ARTS & LITERACY IN HISTORY/SOCIAL STUDIES, SCIENCE, AND TECHNICAL SUBJECTS

Writing Standards K–5

Grade 4 students: Text Types and Purposes

- Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
 - Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.
 - Provide reasons that are supported by facts and details.
 - Link opinion and reasons using words and phrases (e.g., *for instance*, *in order to*, *in addition*).
 - Provide a concluding statement or section related to the opinion presented.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
 - Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
 - Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
 - Link ideas within categories of information using words and phrases (e.g., *another*, *for example*, *also*, *because*).
 - Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - Provide a concluding statement or section related to the information or explanation presented.
- Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
 - Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.
 - Use dialogue and description to develop experiences and events or show the responses of characters to situations.
 - Use a variety of transitional words and phrases to manage the sequence of events.
 - Use concrete words and phrases and sensory details to convey experiences and events precisely.
 - Provide a conclusion that follows from the narrated experiences or events.

Grade 5 students: Text Types and Purposes

- Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
 - Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.
 - Provide logically ordered reasons that are supported by facts and details.
 - Link opinion and reasons using words, phrases, and clauses (e.g., *consequently*, *specifically*).
 - Provide a concluding statement or section related to the opinion presented.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
 - Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
 - Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
 - Link ideas within and across categories of information using words, phrases, and clauses (e.g., *in contrast*, *especially*, *;*).
 - Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - Provide a concluding statement or section related to the information or explanation presented.
- Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
 - Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.
 - Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.
 - Use a variety of transitional words, phrases, and clauses to manage the sequence of events.
 - Use concrete words and phrases and sensory details to convey experiences and events precisely.
 - Provide a conclusion that follows from the narrated experiences or events.

Grade 4 students: Production and Distribution of Writing

- Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language Standards 1–3 up to and including grade 4 on page 23.)
- With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.

Grade 5 students: Production and Distribution of Writing

- Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language Standards 1–3 up to and including grade 5 on page 29.)
- With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.

Grade 4 students: Research to Build and Present Knowledge

- Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.
 - Apply [grade 4 Reading standards](#) to literature (e.g., "Describe in depth a character, setting, or event in a story or drama; drawing on specific details in the text (e.g., a character's thoughts, words, or actions).")
 - Apply [grade 4 Reading standards](#) to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").

Grade 5 students: Research to Build and Present Knowledge

- Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
- Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.
 - Apply [grade 5 Reading standards](#) to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text (e.g., how characters interact?).")
 - Apply [grade 5 Reading standards](#) to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).")

Grade 4 students: Range of Writing

- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Grade 5 students: Range of Writing

- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Grade 4 students: Speaking and Listening Standards K–5

Grade 4 students: Comprehension and Collaboration

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on [grade 4 topics and texts](#), building on others' ideas and expressing their own clearly.
 - Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
 - Follow agreed-upon rules for discussions and carry out assigned roles.
 - Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
 - Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.
- Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- Identify the reasons and evidence a speaker provides to support particular points.

Grade 5 students: Comprehension and Collaboration

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on [grade 5 topics and texts](#), building on others' ideas and expressing their own clearly.
 - Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
 - Follow agreed-upon rules for discussions and carry out assigned roles.
 - Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
 - Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
- Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.

Grade 4 students: Presentation of Knowledge and Ideas

- Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
 - Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate to task and situation. (See grade 4 Language standards 1 on page 28 for specific expectations.)

Grade 5 students: Presentation of Knowledge and Ideas

- Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
 - Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
- Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation. (See grade 5 Language standards 1 and 3 on page 28 for specific expectations.)

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.
 - Form and use the perfect (e.g., *I had walked*; *I have walked*; *I will have walked*) verb tenses.
 - Use verb tense to convey various times, sequences, states, and conditions.
 - Recognize and correct inappropriate shifts in verb tense.¹
 - Use correlative conjunctions (e.g., *either/or*, *neither/or*).
- Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.²
- Correctly use frequently confused words (e.g., *to*, *too*, *two*, *there*, *their*).³

Grade 5 students: Knowledge of Language

- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - Choose words and phrases to convey ideas precisely.⁴
 - Choose punctuation for effect.⁵
 - Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on [grade 5 reading and content](#), choosing flexibly from a range of strategies.
 - Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.
 - Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *telegraph*, *photograph*, *autograph*).
 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.

Grade 5 students: Vocabulary Acquisition and Use

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on [grade 5 reading and content](#), choosing flexibly from a range of strategies.
 - Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.
 - Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *photograph*, *photosynthesis*).
 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on [grade 5 reading and content](#), choosing flexibly from a range of strategies.
 - Interpret figurative language, including similes and metaphors, in context.
 - Recognize and explain the meaning of common idioms, adages, and proverbs.
 - Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.

- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., *quizzed*, *whined*, *stammered*) and that are basic to a particular topic (e.g., *wildlife*, *conservation*, and *endangered* when discussing animal preservation).

Grade 5 students: Vocabulary Acquisition and Use

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on [grade 5 reading and content](#), choosing flexibly from a range of strategies.
 - Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.
 - Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *photograph*, *photosynthesis*).
 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on [grade 5 reading and content](#), choosing flexibly from a range of strategies.
 - Interpret figurative language, including similes and metaphors, in context.
 - Recognize and explain the meaning of common idioms, adages, and proverbs.
 - Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.

- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., *quizzed*, *whined*, *stammered*) and that are basic to a particular topic (e.g., *wildlife*, *conservation*, and *endangered* when discussing animal preservation).

Grade 5 Writing Standards [W]

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* The expected growth in student writing ability is reflected both in the standards themselves and in the collections of annotated student writing samples in [Appendix C of the Common Core State Standards](#) and the [Massachusetts Writing Standards in Action Project](#).

Text Types and Purposes

Note: The intent of Writing Standards 1–3 is to ensure flexibility, not rigidity, in student writing. Many effective pieces of writing blend elements of more than one text type in service of a single purpose: for example, an argument may rely on anecdotal evidence, a short story may function to explain some phenomenon, or a literary analysis may use explanation to develop an argument. In addition, each of the three types of writing is itself a broad category encompassing a variety of texts: for example, narrative poems, short stories, and memoirs represent three distinct forms of narrative writing. Finally, although the bulk of writing assigned in school should address the purposes described below, other forms of writing—for example, lists and notes, descriptive letters, personal reflections—should have a place in the classroom as well. To develop flexibility and nance in their writing, students need to engage with a wide range of complex model texts (see Reading Literature Standard 10 and Reading Informational Text Standard 10) and study authors who have written successfully across genres (see [Appendix B: A Literary Heritage](#)).

- Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
 - Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped in paragraphs and sections to support the writer's purpose.
 - Provide logically ordered reasons that are supported by facts and details.
 - Link opinion and reasons using words, phrases, and clauses (e.g., *consequently*, *specifically*).
 - Provide a concluding statement or section related to the opinion presented.

Should a dog be allowed to run free or always be on a leash in a public park? A fifth grader considers the rewards and hazards of free-ranging dogs in "Be Careful When You Let Your Dog Off Leash," skillfully using details and personal anecdotes to support an argument. Massachusetts Writing Standards in Action. (W.5.1, W.5.3, W.5.4, L.5.1, L.5.2, L.5.5, L.5.6)

In math, instead of writing opinions, students write or draw solutions to math word problems and present arguments to explain their thinking. Connections to the Standards for Mathematical Practice

- Reason abstractly and quantitatively.

See the [pre-K–5 resource section in this Framework](#) or the [Massachusetts Curriculum Framework for Mathematics](#).

- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
 - Introduce a topic clearly, provide a general observation and focus, and group related information logically in paragraphs and sections; include text features (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
 - Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
 - Link ideas within and across categories of information using words, phrases, and clauses (e.g., *in contrast*, *especially*, *;*).
 - Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - Provide a concluding statement or section related to the information or explanation presented.

Massachusetts Writing Standards in Action features two fifth grade research reports designed to inform and explain. "Hot Air Balloons" explores a topic that touches upon both history and science and incorporates multiple sources. (R.5.3, W.5.2, W.5.7, W.5.8, W.5.9, L.5.2, L.5.3) "Pointe Shoes" draws upon multiple print and digital sources as well as personal experience to explain the technical aspects of how a ballet dancer's pointe shoes are made, used, and maintained. (W.5.2, W.5.4, W.5.7, W.5.8, R.5.4, R.5.9, L.5.2, L.5.4, L.5.5, L.5.6)

- Write narratives in prose or poem form to develop experiences or events using effective literary techniques, descriptive details, and clear sequences.
 - Orient the reader by establishing a situation and introducing a speaker, narrator, and/or characters; organize an appropriate narrative sequence.
 - Use narrative techniques such as dialogue, description, and pacing to develop experiences or show responses